



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

Par. gen. d. 3e

THE
JOURNAL
OF THE
ROYAL ASIATIC SOCIETY
OF
GREAT BRITAIN AND IRELAND.



VOLUME THE SEVENTEENTH.

LONDON:
JOHN W. PARKER AND SON, WEST STRAND.

M.DCCC.LX.

HARRISON AND SONS, PRINTERS, ST. MARTIN'S LANE, W.C.

CONTENTS OF VOLUME XVII.

ORIGINAL COMMUNICATIONS.

	PAGE
ART. I.—On the Uriya and Kondh Population of Orissa. By LIEUT. J. P. FRYE, in charge of the Agency in the Hill Tracts of Orissa	1
ART. II.—Chronology of the Medes, from the Reign of Deioces to the Reign of Darius, the son of Hystaspes, or Darius the Mede. By J. W. BOSANQUET, Esq.	39
ART. III.—The Indian Travels of Apollonius of Tyana. By OSMOND DE BEAUVOIR PRIAULX, Esq.	70
ART. IV.—Summary Review of the Travels of Hiouen Tshang, from the Translation of the Si-yu-ki by M. Julien, and the “Mémoire Analytique” of M. Vivien de St. Martin. By PROFESSOR H. H. WILSON, Director of the Society	106
ART. V.—Supplementary Contributions to the Series of the Coins of the Kings of Ghazni. By EDWARD THOMAS, Esq., late of the Bengal Civil Service	138
ART. VI.—Remarks of Raja Radhakanta Deva, on Art. XI., Journal Royal Asiatic Society, Vol. xvl, p. 201, with Observations by PROFESSOR H. H. WILSON	209
ART. VII.—Note on the supposed Discovery of the Principle of the Differential Calculus by an Indian Astronomer. By W. SPOTTISWOODE, Esq.	221
ART. VIII.—Traits of Indian Character. By COL. SYKES, M.P., President of the Society	223
ART. IX.—Translation of a Burmese Version of the Niti Kyan, a Code of Ethics in Pali. By E. FOWLE, Esq.	252
ART. X.—Notes on the Ruins of Wallabhipura. By A. K. FORBES, Esq.	267
ART. XI.—On the Date and Personality of Priyadarsi. By R. G. LATHAM, M.D.	273
ART. XII.—On the Inscriptions found in the region of El-Hârrah, in the Great Desert South-East and East of the Haurân. By CYRIL C. GRAHAM	286

	PAGE
ART. XIII.—Account of some Golden Relics discovered at Rangoon, and exhibited at a Meeting of the Society in June, 1857	298
ART. XIV.—On the Indian Embassy to Augustus. By OSMOND DE BEAUVOIR PRIAULX, Esq.	309
ART. XV.—Description of an Arabic Quadrant. By WILLIAM H. MORLEY, Esq., Librarian to the Society	322
ART. XVI.—On an Ancient Inscription in the Neu - Chih Language. By A. WYLIE, Esq., of Shanghai	331
ART. XVII.—On the Cotton Trade of India. By J. A. MANN, Esq., F.S.S.	346
Index	389

CONTENTS OF PART I., VOL. XVII.

ORIGINAL COMMUNICATIONS.

	PAGE
ART. I.—On the Uriya and Kondh Population of Orissa. By LIEUT. J. P. FRYE, in charge of the Agency in the Hill Tracts of Orissa	1
ART. II.—Chronology of the Medes, from the Reign of Deioces to the Reign of Darius, the son of Hystaspes, or Darius the Mede. By I. W. BOSANQUET, Esq.	39
ART. III.—The Indian Travels of Apollonius of Tyana. By OSMOND DE BRAUVOIR PRIAULX, Esq.	70
ART. IV.—Summary Review of the Travels of Hiouen Tshang, from the Translation of the Si-yu-ki by M. JULIEN, and the Mémoire Analytique of M. VIVIEN DE ST. MARTIN. By PROFESSOR H. H. WILSON, Director of the Society . . .	
ART. V.—Supplementary Contributions to the Series of the Coins of the Kings of Ghazní. By EDWARD THOMAS, Esq., late of the Bengal Civil Service	138
ART. VI.—Remarks of Raja Radhakanta Deva, on Art. XI., Journal Royal Asiatic Society, Vol. XVI., p. 201 ; with Observations by PROFESSOR H. H. WILSON	209
ART. VII.—Note on the supposed Discovery of the Principle of the Differential Calculus by an Indian Astronomer. By W. SPOTTISWOODE, Esq. Communicated by the Director	221
Proceedings of the Thirty-fourth Anniversary Meeting of the Society.	
List of the Members of the Royal Asiatic Society of Great Britain and Ireland. Corrected to July, 1859.	



CONTENTS OF PART II., VOL. XVII.

ORIGINAL COMMUNICATIONS.

	PAGE
ART. VIII.—Traits of Indian Character. By COLONEL SYKES, M.P., President of the Society	223
ART. IX.—Translation of a Burmese Version of the Niti Kyan, a Code of Ethics in Pali. By E. FOWLER, Esq.	252
ART. X.—Notes on the Ruins of Wallabhipura. By A. K. FORBES, Esq.	267
ART. XI.—On the Date and Personality of Priyardarsi. By R. G. LATHAM, M.D.	273
ART. XII.—On the Inscriptions found in the region of El-Hârrah, in the Great Desert South-east and East of the Hâuran. By CYRIL C. GRAHAM, Esq.	286
ART. XIII.—Account of some Golden Relics discovered at Rangoon, and exhibited at a Meeting of the Society, in June, 1857	298
ART. XIV.—On the Indian Embassy to Augustus. By OSMOND DE BEAUVOIR PRIAULX, Esq.	309
ART. XV.—Description of an Arabic Quadrant. By WILLIAM H. MORLEY, Esq. Librarian of the Society	322

	PAGE
ART. XVI.—On an Ancient Inscription in the Neu-Chih Language. By A. WYLIE, Esq., of Shanghai.	331
ART. XVII.—On the Cotton Trade of India. By J. A. MANN, Esq., F.S.S.	346
Index	389

Memoir on the Birs Nimrad, or the Great Temple of Borsippa.
By SIR HENRY C. RAWLINSON, K.C.B.

Proceedings of the Thirty-sixth Anniversary Meeting of the
Society, 14th May, 1859.

ROYAL ASIATIC SOCIETY.

PROCEEDINGS

OF THE

THIRTY-FOURTH ANNIVERSARY MEETING OF THE SOCIETY,

Held on the 23rd May, 1857.

PROFESSOR WILSON,

PRESIDENT AND DIRECTOR,

IN THE CHAIR.

THE FOLLOWING REPORT OF THE COUNCIL

WAS READ BY EDWIN NORRIS, ESQ., THE SECRETARY :—

IN the last year's Report the Council had the satisfaction of congratulating the Society upon a large increase in elections, showing a favourable contrast to the case of several former years, during which there had been a succession of diminishing numbers, with the sole exception of the year 1852, when the demand for an entrance fee was abolished. In the present year the elections of Resident and Non-resident Members amount to the same number as in the last—21;* the losses by death have also been the same—11;† the retirements and

* *Resident Members* :—1. John Ross Butlin, Esq.; 2. The Rev. T. F. Crosse, D.C.L.; 3. John Jackson, Esq., M.D.; 4. John S. Law, Esq.; 5. Professor C. Mac Douall, M.A.; 6. Maj.-Gen. Macintosh; 7. R. P. Nisbet, Esq., M.P.; 8. Edwin Norris, Esq.; 9. Ashness Remington, Esq.; 10. William Spottiswoode, Esq.; 11. Col. Sir Justin Sheil, K.C.B.; 12. T. J. Turner, Esq.; 13. W. H. Fox Talbot, Esq.; 14. R. H. S. Vyvyan, Esq.; 15. The Rev. H. G. Williams; 16. Maj.-Gen. Sir W. Fenwick Williams. *Non-resident* :—17. J. H. Batten, Esq.; 18. E. L. Brandreth, Esq.; 19. Hyder Jung Bahadur; 20. M. Nassif Mallouf; 21. Henry MacFarlane Norris, Esq.

† 1. The Earl Amherst; 2. Sir G. W. Anderson, K.C.B.; 3. The Earl of Ellesmere; 4. Thomas Ellis, Esq.; 5. Lt.-Gen. the Rt. Hon. Lord Viscount Hardinge, G.C.B.; 6. Alexander Robertson, Esq.; 7. Francis H. Robinson, Esq.; 8. J. R. Stoop, Esq.; 9. Thomas Weeding, Esq. *Honorary and Foreign Members* :—1. The Imam of Muscat; 2. Baron Hammer Purgstall.

removals from the books are more numerous than in the last year ;* but this has arisen, in part at least, from the more strict observance of the regulation respecting Members who do not pay their subscription ; several names now placed on the list of defaulters being such as might with equal propriety have been struck out last year, and who would have been so dealt with but for a reluctance to enforce the rule too stringently.

Of the deceased Members our late noble President demands especial mention :—Lord ELLESMERE was born in the beginning of the year 1800. He was educated at Eton and Oxford, where he attained the degree of Bachelor of Arts in the year 1821. In the following year he entered Parliament as Member for Bletchingly (Godstone). He was then entitled Lord Francis Leveson Gower, under which appellation he became a Member of the Privy Council in 1828, and soon after he was named Chief Secretary for Ireland. In 1830, he held the office of Secretary at War under the ministry of the Duke of Wellington. Upon succeeding to the Estates of the Duke of Bridgewater, he assumed the name of Egerton, and became known as Lord Francis Egerton.

In the year 1839 his lordship proceeded to the East for the benefit of his health. He visited the Holy Land, and communicated the result of his observations and his feelings in a poem entitled “The Pilgrimage,” which was much admired, but was subsequently withdrawn from circulation.

When very young he printed a volume of poems, though for private circulation only. His translation of Goethe’s “Faust,” accompanied by versions of popular lyrical selections from the poets of Germany, has passed through several editions.

Lord Ellesmere received by inheritance the splendid collection of pictures formed by the Duke of Bridgewater, and placed them in a gallery in his town residence, where visitors were liberally admitted to view them.

In the year 1849, Lord Ellesmere consented to be put in nomination as President of this Society for the term of three years, to which period the office is limited by its regulations : he was elected by acclamation ; and, so far as his health permitted, he attended the meetings of the Society, and promoted, by his support and influence, the objects for

* *Retirements of Resident and Non-resident Members* :—1. The Rev. John Baker ; 2. R. N. Cust, Esq. ; 3. Alexander Guthrie, Esq. ; 4. T. G. Hough, Esq. ; 5. W. H. C. Plowden, Esq. ; 6. The Rev. C. Pritchard ; 7. Henry Wilkinson, Esq. *Members struck off the list* :—8. The Rev. P. Frost ; 9. The Rev. W. Keane ; 10. Sir Hugh Rose ; 11. Lieut. Hugh Williams, R.A.

which it is instituted. He also held the office of Chairman of the Oriental Translation Committee from the year 1852. He may be regarded, also, as an especial encourager of Oriental literature in its relations to comparative philology, having suggested and assisted the translation and publication of Bopp's Comparative Grammar, from the German, by our colleague, Professor Eastwick.

He was elevated to the Peerage by the title of Earl of Ellesmere, in 1846.

Lord Ellesmere will be favourably remembered among ourselves by the kindness of his manner and ready attention to every suggestion made to him which tended to the prosperity of the Society.

WILLIAM PITT AMHERST, Lord Amherst, was born in the year 1773. He succeeded to the Barony in 1797, on the decease of his uncle; and was created Earl Amherst, and Viscount Holmesdale in 1826.

In the year 1816, Lord Amherst was appointed Ambassador to the Court of Peking, where his refusal to comply with the humiliating ceremonial of the Chinese Court prevented his having an audience of the Emperor after his arrival at Peking.

On his voyage home, the "Alceste," which conveyed Lord Amherst, was wrecked on the island of Pulo Leat. The vessel was destroyed, but several of those on board, amongst whom was his Lordship, escaped in the boats to Batavia, then belonging to the British. The other persons shipwrecked were rescued by a vessel despatched from that port immediately on the arrival of the first party.

In 1823, Lord Amherst went out as Governor-General to India; and although the spirit of his administration was essentially peaceable, he was forced into hostilities with Ava, the first occasion on which that kingdom had come into actual collision with the British Empire of India, and of which the consequence was the addition to our possessions of the province of Arracan, and territories on the Tenasserim Coast. Another important military event signalized his government; the successful siege of Bhurtpore effaced the discredit of the former failure before that fortress.

Lord Amherst's tastes, however, were of a more pacific nature, and on his return from India he retired into privacy, spending the last twenty years of his life chiefly at his estate of Knowle Park, where he died in his 85th year.

HENRY HARDINGE, the son of a clergyman in the North of England, entered the army as Ensign in the year 1798. He was a Lieutenant in 1802; a Captain in 1804; a Major in 1809; and he passed through every step until he was made Field Marshal in 1855. He showed himself an excellent Soldier on all occasions, particularly in the embarkation at

Corunna, in January 1809, and in a still more conspicuous manner at the sanguinary conflict of Albuera.

During the whole of the Peninsular War, he acted as Deputy Quartermaster General of the Portuguese Army. In the campaign that closed at Waterloo he was attached to the Prussian Army, and lost an arm at the battle of Ligny. After peace was restored he held several offices with distinction, and in 1844 proceeded to India as Governor-General.

During the four years in which he held the government the Sikh War was begun and finished; and a large and valuable province was brought under British sway. For his services in India he was elevated to the peerage as Viscount Hardinge. Lord Hardinge originated the policy which since, under Lord Dalhousie, has added the kingdom of Oude to the British Crown. Four years after his return from India he was appointed Commander-in-Chief in succession to the Duke of Wellington; this post he held during the eventful war with Russia.

Field Marshal Viscount Hardinge, G.C.B., was seized with sudden illness while conversing with Her Majesty at Aldershot Camp. He died a few days afterwards, on the 24th day of September last, in the 72nd year of his age.

The merits of Lord Hardinge as a distinguished Soldier belong to the national history; and his public services as Governor-General of India but slightly connect him with this Society. We may, however, advert to the liberal interest which he took in the diffusion of education amongst the natives, and the encouragement he was ever ready to afford to all reasonable projects for the dissemination of useful knowledge.

Mr. THOMAS ELLIS was born at Denbigh in the year 1820. He received the rudiments of education at a school in Montgomeryshire; and learned the Latin and Hebrew languages from his father, whose pecuniary means were insufficient to enable him to do more than put his son in the way of learning to earn a subsistence for himself by trade. Mr. Ellis was however more inclined to literary pursuits; and he found means to travel through the continent of Europe, Egypt, and Palestine, applying himself diligently to the study of Oriental languages and history. After a long struggle with the difficulties attendant on inadequate resources, Mr. Ellis returned to London, and was engaged as a corrector for the press at the Oriental Printing Office of Messrs. Bagster, on an edition of the Polyglot Bible published by those gentlemen, and while engaged in this work he added to his emolument by giving lessons in several Oriental languages. In the year 1851, Mr. Ellis received an appointment at the British Museum, where he remained until his death, chiefly occupied in cataloguing the Syriac MSS. in the Library. His Oriental scholarship was shown in the decipherment and translation of the Chaldee inscriptions upon some Babylonian pateræ brought from Mesopotamia by

Mr. Layard. Fac-similes of these inscriptions, with Mr. Ellis's translations, were printed by Mr. Layard in his "Nineveh and Babylon."

In the latter part of Mr. Ellis's life, he suffered severely from bronchitis. His health gradually declined and on the 9th day of December last, at a time when no immediate danger was apprehended, he was found dead in his chair.

JOSEPH VON HAMMER was born at Gratz, in Styria, in the year 1774; He distinguished himself at an early age in Oriental literature, and before he was twenty-one years old he took a share in the publication of a new edition of Meninski. In 1796, he was appointed Secretary to Baron von Jenisch, who held a high station in the Oriental section of the Austrian Foreign Office. At that time he had distinguished himself by the authorship of several pieces of poetry on Oriental subjects, which were published in the "Deutsche Merkur," conducted by the celebrated Wieland. In 1799, he was sent to Constantinople by the Austrian Government, to qualify himself for Oriental diplomacy, and soon afterwards he had charge of the Austrian Consulate in Egypt. When there, he was engaged as Secretary-Interpreter to the English Expedition under Lord Hutchinson and Sir Sidney Smith; and on the return of the expedition in 1801, he came to London, where he was well received. He was not long afterwards appointed Secretary to the Austrian Legation at Constantinople, and in the year 1807 he returned finally to Austria, residing chiefly in Vienna, where he rose to several distinguished offices in connection with Eastern diplomacy.

Soon after his return he projected the publication of a work on Eastern literature and sciences, which resulted in the valuable "Fundgruben des Orients," better known by its French title, "Mines de l'Orient," of which he was editor, and to which he was an industrious contributor; amongst his contributions was a very elaborate review of the charges against the Knight Templars, the truth of which he was inclined to advocate. Continuing assiduously to prosecute Oriental literature, he conducted that department of the "Vienna Jahrbücher," to which he contributed a great number of valuable criticisms, especially of the writings of English Orientalists, whose merits his knowledge of English enabled him to appreciate. Among other articles, was a copious and valuable Review, of the "Asiatic Researches," as far as then published.

After the peace of 1815, Von Hammer recovered for the Imperial Library of Vienna, a great portion of the MSS. and other treasures which had been carried off by the French armies in 1809.

In 1831 he printed, at Vienna, an edition of the Greek text of "The Meditations of Marcus Antoninus," with a Persian translation; for

this work he was presented, in 1834, by the Shah of Persia, with the order of the Lion and Sun.

In 1835, he was raised to the dignity of a Baron by the title of Baron Hammer Purgstall, in succession to his friend and pupil the last Baron Purgstall, of Schloss Heinfeld, upon whose death the family had become extinct.

After the year 1840, Baron Hammer Purgstall retired altogether from public life, and lived usually at his estates in Styria, where he devoted himself wholly to the cultivation of Oriental literature.

Baron Hammer Purgstall ended his days as he had lived—in the midst of his books. A letter from his daughter, the Baroness Trenck von Tonder, published in the "*Journal Asiatique*," gives a touching account of his last moments. Unable to remain in bed, he had for the last fortnight sat up in his arm chair, before his library table, surrounded by papers; and on the very day of his death his daughter had been compelled, by fear of annoying her father and augmenting his restlessness, to put a pen into his hand, with which he traced some few illegible words, almost in his last moments. He died on the 23rd day of November last, in the eighty-fourth year of his age.

A copy of the concluding volume of his last and perhaps most valuable work was laid on the table of the Society, at its meeting on the 7th of March, with a letter from the author's family.

The foundation of the Imperial Academy of Sciences at Vienna was mainly due to the influence and exertions of Baron Hammer Purgstall, who was made its President. The first Meetings of the new Institution took place in 1847. The Baron took an active share in the Public Inauguration of the Academy, which was celebrated on the 2nd February, 1848.

The following works were written by the Baron, but they are far from being all the productions of this indefatigable and voluminous writer:—

The Constitution and Administration of the Ottoman Empire. 2 vols.
—Tübingen, 1816.

History of Persian Rhetoric.—Tübingen, 1818.

Account of his Journey, in 1804, from Constantinople to Broussa,
&c.—Tübingen, 1818.

History of the Assassins, from Eastern sources.—Stuttgart and
Tübingen, 1818.

Topographical and Historical Description of Constantinople and the
Bosphorus. 2 vols.—Pesth, 1821.

Catalogue of Arabic, Persian, and Turkish Books in the Imperial
Library.—Vienna, 1822.

History of the Ottoman Empire. 10 vols.—Pesth, 1827—1835.

History of Ottoman Poetry. 4 vols.—Pesth, 1836.

Administration of Landed Property under the Khalifat.—Berlin, 1835.
 Picture Gallery of Moslem Sovereigns. 6 vols.—Darmstadt, 1837-9.
 History of the Mongols in Russia (Golden Horde). Pesth, 1840.
 History of the Mongols in Persia (Ilkhane). 2 vols.—Darmstadt, 1842-3.

The Literary History of the Arabs, from its commencement to the end of the 12th century of the Hegira. 7 large vols.—Vienna, 1850-57. (This great book was divided into three epochs, of which only two are completed, up to A.H. 650, A.D. 1258.)

Translations from Hafiz.—1813. (Persian.)

Translations from Motanabbi.—1823. (Arabic.)

Translations from Baki.—1825. (Turkish.)

The following texts of Oriental works were edited by Baron Hammer Purgstall :—

The Gul and Bulbul of the Turkish Poet Fasil.—Leipzig and Pesth, 1835.

The Golden Collar of Samachshari; Arabic.—Vienna, 1835.

The Rosenflor des Geheimnisses; a didactic poem of Shebisteri on Sufyism.—Pesth, 1838.

Old Turkish poem on Falconry (Hawking): Falknerklee.—Vienna, 1840.

The IMAM OF MUSCAT exhibits one of the rare examples of an Oriental sovereign obtaining power and prosperity by the arts of peace, and retaining them for half a century by sagacity and well-understood policy. The Imám succeeded to the Asiatic portion of his dominions, and to the territory of Zanguebar on the African coast, at the age of seventeen, in the year 1806. He derives his title from the town of Muscat, the capital of the province of Oman, on the extreme eastern part of Arabia, and bordering on the entrance of the Persian Gulf.

The Imám, very early in his reign, had the sagacity to perceive that the surest way of governing his people was to increase their prosperity at home, and this he effected by the conquests which especially belong to peace. He created a small navy and employed his ships chiefly in commerce, in the profits of which he himself participated; and he showed better judgment than some European Governments have yet exhibited in encouraging foreign commerce by low duties. His alliances with England, France, and America added much to the prosperity of his dominions; and the treaties made with those powers were faithfully maintained. By a covenant with England, concluded in 1832, he

abolished the existence of the slave trade. He encouraged the cultivation of the sugar-cane, coffee, and spices, and in a long reign of more than half a century he suffered none of those changes which so frequently chequer the fortune of Oriental states.

The Imám was elected an Honorary Member of the Society in 1836, and a diploma was sent out to him through the channel of Captain Cogan, a Member of the Society, on his taking charge of one of the finest royal yachts as a present from His Majesty William IV. to the Imám. This yacht was a graceful return for the ship "Liverpool," of 74 guns, which had been brought by Captain Cogan in the preceding year as a present to His Majesty from the Imám.

The only gentleman elected in the past year as an Honorary Member is the Rev. ROBERT CALDWELL, LL.D., who, by his work entitled "Comparative Grammar of the Dravidian, or South-Indian Family of Languages," has thrown much light on the literary languages of Southern India, and investigated their relations to the dialects of the aboriginal tribes of the peninsula. He has pointed out, in this valuable work, some analogies which these idioms present to that very large class which has been called Turanian; and has afforded, within the limits to which he has confined himself, grounds for the researches of those philologists who are examining into the relations which may exist between these wide-spread languages.

The Report of last year noticed the election of the two Kings of Siam to our class of Honorary Members; ornamented diplomas were accordingly dispatched to their majesties in due course; but, unfortunately, on the arrival of the vessel at Siam, by an accident to the boat to which these documents, as well as some presents from Her Majesty's Government, were transhipped, everything on board was lost. The Council in consequence determined to have two new diplomas prepared, which it may be hoped will reach their destination without accident.

The printing of the Inscriptions on the Assyrian and Babylonian Monuments, which was mentioned in the Report of last year, is steadily advancing. The "Annals of Sennacherib," those of Tiglath Pileser I., the extensive historical tablets of Sardanapalus, and the monument of Shamas Phul in the hieratic character, are printed. Various short legends of the Biblical Pul, the Nebi Yunus inscription of Sennacherib, that upon the cylinder of Neriglissor in the library of Trinity College, Cambridge, that of Esar Haddon from the cylinder in the British Museum, collated with fragments in the same collection, and the inscriptions of Nebuchadnezzar and Nabonit, are all traced, and several

of them are only waiting for trifling corrections to be also printed off. Many smaller monuments are in progress. The greater part of the "Comparative Alphabets, Grammars, and Vocabularies," and several of the mythological lists, have been copied from the clay tablets, and will be traced on the stone when the monuments now in progress shall be completed.

The transliteration in Roman characters, and interlineary translation, by Sir Henry Rawlinson, will be printed simultaneously with the original inscriptions; this will be done at Sir Henry's own cost. A freer version of the same will form part of the Society's Journal; but the hope held out by the Government of pecuniary assistance in this part of the work has not yet been followed by any result.

When this important work shall have been completed, the Council trust that Sir Henry Rawlinson will conclude the two volumes of the Journal yet remaining unfinished—that which contains the Vocabulary of the Ancient Persian, and the one comprising the Analysis of the Babylonian version of the Behistun monument of Darius.

At a recent Meeting of the Society, it was stated that Dr. Hincks, Dr. Oppert, Mr. Fox Talbot, and Sir Henry Rawlinson, had independently prepared versions of one and the same Inscription—that of Tiglath Pileser I., dated in the twelfth century before Christ; each version to be sent sealed to this Society, in order to be subsequently submitted to a committee, who would compare the results of the labours of four gentlemen, pursued without communication with each other. The versions of Dr. Hincks and Dr. Oppert were incomplete; the former gentleman did not receive a copy of the Inscription until the 26th of April, too late for going through the whole of so long a Document; and Dr. Oppert worked upon a copy made by himself from an imperfect original, whereas the lithographed copy in the hands of the other decipherers was prepared from a collation of four cylinders.

The gentlemen who consented to meet on the occasion were, the Very Rev. the Dean of St. Pauls; the Rev. Dr. Whewell; Mr. Grote; and Sir Gardner Wilkinson; but before the close of the Meeting, Dr. Whewell was compelled, by a previous engagement, to leave. The President of the Society, who was a member of the Committee, had been obliged to leave town previously to its assembling.

The seals affixed by the gentlemen who sent their versions were broken by the Secretary of the Society in the presence of the Committee, who thereupon proceeded to compare the several versions. Each Member taking a version in his hand, the four read successively out of each version the same paragraph of the inscription, section by section, in order more readily to decide upon their agreement or disagreement.

They separated without making any formal Report upon the matter, but have promised to furnish such Report after further consideration.

[The President here stated to the Meeting that he had been unable to be present at the opening of the Versions, being engaged at Oxford, but that the papers having been sent to him on the day before the meeting, he had found time to go through the versions of Sir H. Rawlinson and Mr. Talbot, and to compare them paragraph by paragraph; he had also looked into the translations of Dr. Hincks and Dr. Oppert, but he had not had time to give them the same precise examination. This he should do so without delay; in the mean time he had made himself sufficiently acquainted with the several translations to be satisfied that there was a very close agreement with regard to the value of the characters, so that the powers of the alphabet, if it might be so termed, in which the inscription is written, may be regarded as satisfactorily determined, whatever slight and unfrequent modification may be hereafter found necessary. It was somewhat different with respect to the words, the meanings of very many of which were differently expressed; yet at the same time, although individual terms were variously rendered, there was a remarkable concurrence as to the general meaning of each paragraph, showing that the translators were agreed as to the sense of a great proportion of the words and the construction of the sentences; upon the whole, therefore, it appeared to him that a very considerable proportion of the vocabulary had been determined, and it might be confidently anticipated that the ability and perseverance which had accomplished so much, would, eventually leave little to be questioned.]

The Library has received an important addition to its manuscript stores from our colleague, General Bagnold, who has kindly presented to the Society several Persian volumes. One of them, a copy of the "Anwari Soheili," is distinguished by its antiquity, having been written in the year 926, (1519 A.D.) or only fifteen years after the decease of the author of that celebrated composition.

Once only, during the past Session, an evening Meeting has been held in the rooms of the Society. At this Meeting Dr. Buist, of Bombay, gave an interesting summary of the observations he had made immediately before his departure for England, on the construction of Railways leading from Bombay into the interior, and of the intelligent and ready way in which the natives had laboured at the works, and the valuable results these poor people had derived from their employment, as shown in the habits of order and industry they were acquiring, and in the increase of their means. Dr. Buist's Lecture was numerously attended

by members of the Society and their friends, and a good deal of interesting discussion followed its delivery.

The Council have felt great pleasure in contributing, in however small a degree, to the Manchester Exhibition of Art Treasures, by the loan of various objects of interest in the Society's Museum. The articles selected are chiefly specimens of Oriental art and manufactures, some of them of considerable rarity; and the Council trust that they may afford instruction as well as gratification to the numerous visitors which the Exhibition is so calculated to attract.

The Oriental Translation Committee have recently patronized (by subscribing for a certain number of copies) an interesting work, entitled —“*Mémoires sur les Contrées Occidentales, traduites du Sanscrit en Chinois, en l'an 648 par Hiouen Tssang, et du Chinois en Français par M. Stanislas Julien.*” The first volume has just been issued. It contains a valuable map of India and Central Asia, with the names of the various countries as they existed in the 7th century of the Christian era, and the routes taken by Hiouen Tssang in his travels.

The Committee have also agreed to subscribe for copies of a translation into French, by Professeur Dulaurier, of the Armenian Chronicles of “Matthieu d'Edesse, continué par Grégoire le prêtre.” This volume will form one of the series comprised in the projected collection announced as the “*Bibliothèque Historique Arménienne*,” and will probably be published at the end of the year.

The seventh and last volume of the “*Bibliographical Lexicon*” of Hadji Khalfa is nearly completed, and the learned translator and editor, Professor G. Flügel, promises that it shall, if possible, issue from the press at the close of the year, in accordance with the wishes of the Committee. The delay which has retarded its appearance is mainly attributable to the laborious preparation of supplementary matter and copious indexes.

The translator of the “*Kitáb al Yamíni*” reports that, notwithstanding his exertions, he has not yet been able to complete his labours on those works, but that he hopes to finish them by the end of the present year.

AUDITORS' REPORT.

The following Report of the Auditors was read by ARTHUR ASHFITZ, Esq. :—

“The Auditors, after carefully examining the accounts of receipts and payments of the Society for the year 1856, and comparing the payments with the vouchers, have much satisfaction in finding the out-

turn of the pecuniary transactions of the year more favourable than it has been for a considerable time past, and more so than had been estimated at the close of the preceding twelvemonth, the actual balance at the close of the year's account being £214 9s. 1d. This is owing partly to a considerable accession of new Members, and partly to some anticipated expenses not having been incurred; also to an increased sale of the Society's publications.

"Out of the above balance the sum of £142 18s. 1d. being the remainder of the Government Grant made, in 1851-2, for the publication of the Rawlinson papers, remains to be applied to those purposes, as the sum of £29 only was found chargeable to that grant on account of Part 2 of Vol. 15 of the Society's Journal, published in 1856. The materials for additional Assyrian parts, in completion of the unfinished volumes, 11 and 14, are not yet ready for printing. The net balance of the Society's own cash at the close of 1856 was £71 11s.

"There is every reason to hope that the balance at the close of the current year will be still more favourable than at the end of 1856.

"JUSTIN SHEIL } Auditors on the part
"ARTHUR ASHPITEL, F.S.A. } of the Society.

"J. W. BOSANQUET, Auditor on the part of the Council.

"5, New Burlington Street,

"May 9, 1857."

J. W. REDHOUSE, Esq., proposed the following resolution:—

"That the Report of the Council on the proceedings of the Society and the Financial Report of the Auditors, which have been now read, be adopted and printed; and that the thanks of the meeting be returned to the Auditors for their careful examination of the Society's accounts."

This motion was seconded by R. HUNTER, Esq., and carried unanimously.

SIR HENRY RAWLINSON moved the following vote, which was seconded by EDWARD THOMAS, Esq., put to the meeting by COLONEL SYKES, and carried unanimously:—

"That the cordial thanks of the Society are eminently due to PROFESSOR WILSON, the President and Director of the Society, for his unremitting exertions tending in every way to promote the welfare of the Society."

PROFESSOR WILSON briefly addressed the meeting in acknowledgment of the vote passed in his favour.

It was then moved by JOHN ALGER, Esq.:

"That the thanks of the Society be presented to the Vice-Presidents and members of the Council for their zealous attention to the interests of the Society."

GENERAL DE LA MOTTE seconded this Motion, which was put to the vote and carried unanimously.

ARTHUR ASHPITEL, Esq., moved, and the Rev. JAMES REYNOLDS seconded a vote of thanks to the Treasurer, Secretary, and Librarian for the faithful discharge of the duties of their respective offices.

RICHARD CLARKE, Esq., returned thanks.

Scrutineers having been appointed, the Meeting proceeded to choose the Officers and Council of the Society for the forthcoming year.

The following list was announced as the result of the ballot:

RICHARD CLARKE, Esq., *Treasurer*; EDWIN NORRIS, Esq., *Secretary*; JOHN SHAKESPEAR, Esq., *Librarian*; *Council*: ARTHUR ASHPITEL, Esq.; N. B. E. Baillie, Esq.; W. B. Bayley, Esq.; Sir Proby T. Cautley, K.C.B.; Sir Thomas E. Colebrooke, Bart., M.P.; W. J. Eastwick, Esq.; Samuel Gregson, Esq., M.P.; The Right Honourable Holt Mackenzie; John Marahman, Esq.; O. De. B. Priaulx, Esq.; H. T. Prinsep, Esq.; Lieutenant Colonel Sir Henry C. Rawlinson, K.C.B.; Colonel Sir Justin Sheil, K.C.B.; Edward Thomas, Esq.; J. P. Willoughby, Esq., M.P.

ABSTRACT OF RECEIPTS AND DISBURSEMENTS, from 1st January to 31st December, 1856.

RECEIPTS.		DISBURSEMENTS.	
	£ s. d.		£ s. d.
147 Subscriptions of Resident Members, at 3 <i>l.</i> 3 <i>s.</i>	463 1 0	House Rent one Year, deducting Property Tax	270 13 4
18 ditto, Original Members, at 2 <i>l.</i> 2 <i>s.</i>	37 16 0	Assessed Taxes	19 17 2
32 ditto, Non-Resident Members at 1 <i>l.</i> 1 <i>s.</i>	33 12 0	Parochial Rates	22 18 4
Arrears of Subscription paid up ...	68 5 0	Water Rate, one Year	5 19 0
		Fire Insurance on House, 1854-5-6	16 17 6
	£602 14 0		£386 5 4
Compositions of Subscription	136 0 0	House Expenses and Housekeeper's Wages	57 9 8
Annual Donation of East India Company.....	219 0 0	Coals 16 <i>l.</i> 14 <i>s.</i> ; Gas 1 <i>l.</i> 10 <i>s.</i>	18 4 0
Dividends on Consols	50 12 0	Painting outside of House and sundry Repairs	75 13 8
Publications sold.	64 3 11	Printer for Journal Vol. 15, Part. 2, and Sundries	34 10 2
	£1038 9 11	Lithography 4 <i>l.</i> ; Stitching Journal 7 <i>s.</i>	143 12 0
In Bankers hands end of 1855	84 15 3		11 0 0
		Salaries of Secretary, Assistant Secretary, Clerk, and Porter.....	154 12 0
		Collector's Pledge on Subscriptions	229 12 0
			29 15 0
		Books and Periodicals 5 <i>l.</i> 14 <i>s.</i> 4 <i>d.</i>	269 7 0
		Binding 4 <i>l.</i> 2 <i>s.</i> 1 <i>d.</i>	
		Stationery	9 16 5
		Postage and Carriage.....	18 15 7
		Diplomas for Kings of Siam	9 8 5
		Petty Expenses 15 <i>l.</i> 2 <i>s.</i> 9 <i>d.</i> ; Secretary's Balances 2 <i>l.</i> 12 <i>s.</i> 9 <i>d.</i> ..	12 13 0
			17 15 6
			63 7 11
		Balance in Banker's hands 1st January 1857, ..	£928 16 1
			214 9 1
			£1188 5 2

[Assets, 1,806*l.* 19*s.* 5*d.* Three per Cent Consols.]

ROYAL ASIATIC SOCIETY

PROCEEDINGS

OF THE

THIRTY-FIFTH ANNIVERSARY MEETING OF THE SOCIETY,

Held on the 15th May, 1858.

PROFESSOR WILSON,

PRESIDENT AND DIRECTOR,

IN THE CHAIR.

THE FOLLOWING REPORT OF THE COUNCIL

WAS READ BY THE PRESIDENT:—

THE condition of the Royal Asiatic Society has not undergone, during the past year, any material alteration. The number of retirements has been 6; that of deaths, 11, inclusive of 2 Foreign Members; the total diminution, 17. On the other hand, the number of Elections is 11,—leaving a falling off of 6 Members. The number of Elections, it is true, is considerably fewer than that of the two preceding years, in each of which it was 21; but it exceeds that of 1855, in which year the elections were no more than eight. That there should have been a reduction in the last year is no more than was to have been expected from the state of public affairs, and the distress and alarm which they have so widely occasioned. The following are the particulars of the Elections, Retirements, and Deaths for 1857-8:—

Elections of Resident and Non-Resident Members:

- | | |
|--------------------------|----------------------------------|
| 1. Henry Brereton, Esq. | 7. A. S. Le Messurier, Esq. |
| 2. Colonel J. T. Bush | 8. Charles MacFarlane, Esq. jun. |
| 3. C. H. Dickson, Esq. | 9. Sir Charles Nicholson |
| 4. Cyril C. Graham, Esq. | 10. Mrs. F. H. Robinson |
| 5. H. W. Hammond, Esq. | 11. The Rev. R. E. Tyrwhitt |
| 6. Captain F. Hughes | |

Retirements:

- | | |
|-------------------------------|------------------------|
| 1. The Rev. J. Cape | 4. J. F. M. Reid, Esq. |
| 2. The Rev. E. P. Lewis | 5. A. Remington, Esq. |
| 3. Lieut.-Colonel J. Oliphant | 6. S. R. Solly, Esq. |

Deaths of Resident and Non-Resident Members:

- | | |
|---------------------------|------------------------------|
| 1. Major-General Bagnold | 6. E. J. Remington, Esq. |
| 2. Henry Brereton, Esq. | 7. Dr. John Forbes Royle |
| 3. J. R. Colvin, Esq. | 8. R. H. Solly, Esq. |
| 4. Captain Fletcher Hayes | 9. Sir Henry Strachey, Bart. |
| 5. John Hodgson, Esq. | |

Deaths of Foreign Members:

- | | |
|---------------------------|-----------------------------|
| 1. The Hon. Louis MacLane | 2. General Count de Ventura |
|---------------------------|-----------------------------|

Although we have to regret, among the casualties, the loss of several distinguished members of the Indian service, who were zealous friends of the Society, and although some of them, as Mr. John Colvin and Captain Fletcher Hayes, added to their public merits that of more than ordinary conversancy with the languages of the East, their official functions left them little leisure to devote any time to the cultivation of Oriental literature, or take any part in the proceedings of this, or any other Asiatic Society. Mr. Colvin's life, prematurely shortened, no doubt, by the heavy responsibility and anxieties of his position, would, in all probability, had it been spared, still been engrossed by the duties of public life. But much was to have been expected from Captain Hayes, who, besides highly respectable classical attainments, in which he had taken a degree at Oxford, whilst studying in the University during a period in which he was in England for the recovery of his health, was a promising Arabic and Persian scholar; and had collected a valuable library of Manuscripts, of which he would, no doubt, when opportunity permitted, have made a judicious and advantageous use. His library shared the fate of his other property, which was ruthlessly destroyed.

There is one name in the list of deaths which the Society could have little anticipated, and cannot advert to without paying something more than a passing tribute of regret:—Dr. JOHN FORBES ROYLE, from the time of his return to England, was a zealous and active Member of the Society, and took a leading part in the proceedings of a Committee of the Society, founded at his suggestion, and introduced by the Right

Honourable Holt Mackenzie, in a paper based avowedly upon communication with Dr. Royle, as well as by an elaborate and valuable memoir by himself, for the investigation and development of the commercial resources of India, especially in regard to the cultivation of oil seeds, tobacco, tea, and cotton. This Committee of Agriculture and Commerce, instituted in 1836, no doubt suggested to the Directors of the East India Company the advantage of adopting arrangements for a similar object; and the services of Dr. Royle being placed in requisition by them, he was withdrawn from the Committee, and an end was put to its labours. Dr. Royle, however, still continued his communications to the Society in the form of memoirs and lectures; whilst he discharged his official duties with the most beneficial consequences,—one of which is the formation of the Museum recently opened at the East India House, where specimens of the arts and manufactures of the natives of India may be seen, as well as a variety of natural products, the application of which to art and manufacture is likely to prove of the greatest value and importance. We are enabled to add a further specification of Dr. Royle's claims to the grateful recollection of the Society from the communication of a friend and colleague :—

John Forbes Royle was the only son of William Henry Royle, Captain in the East India Company's service, who died in 1803, at the age of forty, having served 23 years. The subject of this memoir was born at Cawnpore, and he received his early education under Dr. Sangster of Haddington. He was afterwards placed at the High School in Edinburgh. Though intended for the army, while waiting for an appointment at Addiscombe he studied medicine under Dr. A. T. Thomson. Induced by his love of science, he continued in the medical profession, instead of accepting a military appointment, and acquired, under his preceptor, that taste for botany in which he was finally so eminent. In 1818 he became assistant-surgeon on the Bengal Establishment to His Majesty's 17th and 87th Regiments, and also to the Company's Native Artillery, Cavalry, and Infantry.

In 1823, he was appointed to the Medical Station at Saharunpur, to which was added the superintendence of the Company's Botanic Garden at that place, where he formed collections of native products (which afterwards obtained the prize at the Exhibition of 1851), and the botanical collection which formed the basis of his large work on the botany of the Himalaya Mountains. After a laborious research, Mr. Royle succeeded in producing senna, rhubarb, oil of turpentine, extract of henbane, and other substances of public utility, capable of competing with the best articles of the kind sent from England. All were pro-

nounced to be of superior quality, and some of them now form the subject of an extensive commerce. During this time he arrived at conclusions, then considered visionary, but which have since resulted in the successful cultivation of tea in the Himalaya.

In consequence of a petty insurrection in the Punjab, Dr. Royle, with several others, volunteered in the attack and capture of the Fort of Koonja, for which service they received the thanks of the Court of Directors.

For the purpose of laying before the public the results of his Indian researches, Dr. Royle returned to England in 1831, bringing with him his numerous collections. Shortly after his arrival, he received the degree of Doctor of Medicine from the University of Munich; and, on the resignation of Dr. Paris, he became a successful candidate for the Professorship of *Materia Medica* and Therapeutics in King's College, London. About this time, Mr. Royle furnished a series of articles to the "*Penny Cyclopædia*;" and in 1837, he published an "*Essay on the Antiquity of Hindu Medicine*," the basis of which was formed by an Introductory Lecture, delivered at King's College; and which brought, for the first time, before the public the fact of the very early importation from India into Europe of a variety of natural and manufactured products. In 1839 were published Mr. Royle's "*Illustrations of the Botany and Natural History of the Himalayan Mountains*," in two very handsome folio volumes,—a work that at once placed him in a high position amongst the cultivators of natural science in Europe. The second volume consists of drawings, chiefly botanical, made from beautiful delineations by the native artists attached to the Botanical Garden at Saharanpur. These were followed, in 1840, by an "*Essay on the Productive Resources of India*."

In 1844, being Dean of the Faculty of Medicine at King's College, he was requested to publish his "*Introductory Lecture on Medical Education*;" and, in 1845, a "*Manual of Materia Medica and Therapeutics*," intended for the students of the College. He took a very active part in the reforms of the Royal Society, and in founding the Philosophical Club. In 1847, Dr. Royle published a work on the Cultivation of Cotton in India, and elsewhere; and on its commercial results. He was amongst the first consulted on the project of the Great Exhibition of 1851. Being in charge of the correspondence relative to the natural products of India, he furnished a communication on the subject, published in the Appendix, No. 3, of the Preliminary Report, which, with his lists and instructions, were immediately sent to India, two months before the instructions were issued by the Royal Commissioners in this country.

He was appointed one of the Local Commissioners of the Exhibition for the city of London, and was requested to organise and arrange the department of raw products, and to take charge of the Indian Department of the Exhibition. His time was now occupied by the botanical articles in Dr. Kitto's "Cyclopædia of Biblical Literature," as well as by various notices and lectures, amongst which were two on the "Results of the Great Exhibition," and a lecture on "Indian Products known to the Ancients." Another lecture on the same subject, printed in the form of a pamphlet on "Indian Fibres," was afterwards expanded into a larger work on the "Fibrous Plants of India," published in 1855. In the same year he had the arrangement and superintendence of the Oriental Collection at the Great Exhibition of Paris, where he received, for his works and papers, "la grande médaille d'honneur;" and, in recognition of these, and his public services in relation to the Exhibition, the decoration of an officer of the Legion of Honour was conferred upon him.

In 1856, the immense increase of duties at the India House compelled Dr. Royle to resign his Professorship at King's College, which he had held during 19 years. In the spring of 1857, he was invited to undertake the superintendence and arrangement of the Indian collection in the Exhibition of Art-Treasures at Manchester.

Dr. Royle was mainly instrumental in the revival which has taken place in the Horticultural Society, during the last two years; and to his exertions entirely is the public indebted for the collection and scientific arrangement of the treasures contained in the new Museum now open at the India House.

Dr. Royle was a Fellow of the Royal, Linnæan, Geological, and Horticultural Societies; and a Member of the Asiatic Society of Calcutta, as of Great Britain. Besides the pages of our own Journal, he was an occasional contributor to those of the Transactions of the Linnæan and Horticultural Societies. He died in January last.

It is in contemplation by the Court of Directors to place Dr. Royle's bust in the New Museum recently opened.

The Council regret to state that the communications to the Society on subjects of Oriental literature, science, topography, ethnology, and similar topics have been but rare: and the Journal has, consequently, made but little progress. No number has to be laid on the table for the past year. This is in part owing to the communications made to other Societies of matters relating to India; and although, as observed by our late President, it signifies not by what channel information is conveyed to the public, this applies to the public, and not to the

Society, in the pages of whose Journal it would be most appropriate to insert all such communications. Another reason might be supposed to be the exhaustion of the topic after nearly a century of research. But this is far from being the case; and even in Sanskrit literature there is much untrodden ground; whilst much remains for investigation in the literature of the Mohammedans, and in the languages of the further East, the Archipelago, Siam, Ava, China, and the various tribes of Asiatic Russia,—the publications of other Asiatic Societies shew no dearth of materials. The “*Journal Asiatique*” proceeds with a regularity unremitted by 37 years of exertion. The “*Zeitschrift*” of the German Oriental Society is equally regular and abundant in interesting matter; and the American Oriental Society has published five highly respectable volumes, and has a sixth in contemplation. It is not, therefore, any deficiency of materials to which we are to ascribe the paucity of our literary contributions, but to the absence or the indifference of those who might supply the Society with useful information, to be circulated by its Journal.

The Society has been indebted, during the season, to three of its members for evening lectures: one by Dr. Latham, on the Asiatic Elements of the Ugrian Mythology, with especial reference to the Finn poem, the *Kalevala*; one by Dr. Barth, on the tribes of Northern Africa, their relation to the Phœnicians, and the peculiar alphabet in use among them; and the other, by Cyril C. Graham, Esq., on the ethnology of the ancient inhabitants of Syria and Palestine. These lectures were well attended.

No progress has been made, in the Society’s Journal during the past year, in the illustration or translation of the Assyrian Inscriptions. Of the texts in the course of publication by the Government, through the Trustees of the British Museum, and under the superintendence of Sir Henry Rawlinson, forty sheets have been printed, and ten more, it is expected, will be completed within two months, when the whole will be bound in a volume, and published. Those printed comprise the inscriptions of the Assyrian and Babylonian Kings, the earliest of which is that of Tiglath Pileser the First, dated about 1150 B.C., translations of which formed the subject of the comparison, of which the result has been published by the Society. The latest is that of Nabonidus. Inscriptions on several bricks of more ancient monarchs will be published with those already mentioned. When completed and translated, the Society hope to be enabled to lay before the public the general purport of the documents, and the philological and historical results which they are calculated to establish.

The Council has now to call the attention of the meeting to the alteration required by the rules of the Society in its officers. The period for which the Presidentship is held expires on the present occasion, and the meeting will have, therefore, to elect a successor. The following gentlemen, also, cease to be members of the Council :—

Wm. B. Bayley, Esq.

Sir Proby T. Cautley, K.C.B.

Sir Thomas E. Colebrooke, Bart., M.P.

Osmond De Beauvoir Priaulx Esq.

J. W. Willoughby, Esq., M.P.

In whose places it is proposed to substitute the following :—

J. W. Bosanquet, Esq.

Lieut.-General Briggs, F.R.S.

Colonel G. Everest, F.R.S.

James Fergusson, Esq.

The Right Hon. Lord Viscount Strangford.

In February last, the Council had before it a letter from the Rev. J. Edkins, of Shanghai, announcing the formation of a new Literary and Scientific Association at that place, and expressing, on the part of its members, a desire to be affiliated to this Society under the appellation of "The North China Branch of the Royal Asiatic Society." Mr. Edkins's communication was accompanied by a copy of the rules and regulations of the Shanghai Society, and the names of its officers ; and a minute was passed by the Council, to the effect that the proposition be recommended to the members for their adoption at the present anniversary meeting. A resolution for the formal admission of the Shanghai Society as a branch of this Institution, will therefore be submitted to you.

The Oriental Translation Committee are about to issue to their subscribers copies of a work recently patronised by them, entitled "Chronique de Matthieu d'Edesse, avec la continuation par Grégoire le Prêtre, &c." This work forms a portion of the "Bibliothèque Armenienne," now in the course of publication and translation by Professor Dulaurier, of Paris.

The translation of the *Kutab al Yamini*, by the Rev. James Reynolds, the Secretary to the Committee, is now in the press. This translation is made from a Persian version of the celebrated Arabic work of Al-Utbi, and comprises historical memoirs of Sabaktagin, and Mahmud of Ghazni, founders of the Ghaznavide dynasty, and early conquerors of

Hindustan. It includes the whole of the reign of Sabaktagin, and the most important portion of that of Mahmud. The book was written by a courtier in the service of these Princes, and was translated into Persian about A.D. 1186.

The concluding volume of Haji Khalfa's Lexicon will be published during the present year.

AUDITORS' REPORT.

The following Report of the Auditors on the financial condition of the Society was then read by J. C. MARSHMAN, Esq. :—

"The Auditors have diligently examined the statement of receipts and disbursements of the Society for the year 1857, and have compared each item of payment with the vouchers. They regret to observe that the financial result of the year is not so flattering as that of the preceding twelvemonths; the total receipts of 1856 having been £1053 9s. 11d., and of 1857, £852 12s. 8d. This is to be attributed, partly to the diminution of members, and partly to the difference of "Compositions of Subscriptions," which, in 1856, amounted to £126, and, in the past year, to £36 15s.; as, also, to a smaller amount of arrears received, which, in 1857, only reached £15 15s., while it amounted to £68 5s. in the preceding year. But as the expenditure in the past year has been less by £71 11s. 8d. than that of 1856, the balance in the Banker's hands is still £212 4s. 4d.,—less by only £2 4s. 9d. than that of the 31st of December, 1856.

"Of this balance, however, the sum of £142 18s. 1d. belongs to the fund created by the Government grant for the publication of the Rawlinson papers, and which must be reserved to meet the expense connected with that particular object. The sum in hand available for the general disbursements of the Society amounted, therefore, at the close of the last year to £69 6s. 3d.

"The Auditors are happy to be able to observe, after a careful examination of the position and prospects of the Society, that there is every reason to expect a larger balance at the close of the present year in the Bankers' hands.

"J. W. BOSANQUET } Auditors on the part
"JAS. FERGUSSON } of the Society.

"JOHN C. MARSHMAN, Auditor on the part of the Council.

"Royal Asiatic Society's House,
"5, New Burlington-street,
"8th May, 1858."

When the reading of the Reports was concluded, the following resolution was proposed by Rt. HUNTER, Esq., seconded by Major-General LUDLOW, and carried unanimously :—

“That the Report of the Council, and that of the Auditors, be received and printed; and that the thanks of the Meeting be voted to the Auditors for their careful investigation of the Accounts of the Society.”

J. C. MARSHMAN, Esq., on the part of the Auditors, returned thanks for the vote passed; and said that the labours of the Auditors had been greatly simplified by the very lucid manner in which the Accounts of the Society were kept, and the vouchers presented.

The President brought to the notice of the Meeting an application which had been made to the Council by the recently-formed Literary and Scientific Society at Shanghai, to be incorporated as a Branch of this Society. In recommending the Meeting to give due effect to this request of the new Association, the President observed that the Secretary of the Shanghai Society was the Rev. J. Edkins, to whom this Society was indebted for some interesting communications on the subject of ancient Buddhist books from India, brought to China many ages ago, and translated into Chinese.

The proposition was agreed to by the meeting, *nem. con.*

J. C. MARSHMAN, Esq., moved the following resolution :—

“That this Meeting record its grateful appreciation of the valuable services of Professor WILSON, who is now about to relinquish the Presidentship of the Society.”—Mr. Marshman remarked that he was certain he need not dwell at any length on the eminent services which Professor Wilson had rendered to the cause of Oriental literature. It was, he believed, fifty years since he first set foot in India, and from the time of his arrival he had devoted himself with the greatest assiduity to the cultivation of the Sanscrit classics, and his exertions had been rewarded with such success as to place him in the foremost rank of Orientalists, and upon a level with the great names of Jones and Colebrook. On his return to England, now twenty-five years since, Professor Wilson did not relinquish his partiality for Oriental studies, but still continued to pursue them with unabated ardour, of which the most satisfactory evidence was presented by the contributions with which he had enriched the Journal of this Society. Mr. Marshman believed that no small share of the repute in which this Society was held, both in England and in Europe, was to be attributed to the labours and renown of the President they were now to lose, and he trusted that whenever the chair should be again vacant, they would have the pleasure of welcoming him back to it.

The resolution proposed by Mr. MARSHMAN, was seconded by OSMOND DE BEAUVOIR PRIAULX, Esq., and carried unanimously.

Professor WILSON, in acknowledging the vote passed in his favour, expressed the obligations which he felt on this occasion—as on former occasions—for the kind support and encouragement he had always received from the Society,—which had increased his zeal, and had furnished to him an additional inducement to continue in this country the same line of study he had commenced in India. He regretted that his communications to the Society had not been so frequent of late as he could have wished, but he must plead—as they all could do—that he was not so young as he was ; and he certainly was not so capable of exertion. He feared he could hardly look forward, now, to a period of three years for the resumption of the office he was quitting. Moreover, his defect of hearing somewhat incapacitated him from properly fulfilling the duties of the office. He assured the meeting that, nevertheless, he should always be ready and willing to afford whatever services he could to promote the welfare of the body.

It was moved by the Rev. WM. PARRY, seconded by J. S. LAW, Esq., and carried *nem. con.*:—

“That the cordial thanks of the Meeting be tendered to the Vice-Presidents and Council for the interest they have taken in the affairs of the Society during the past year.”

Mr. MARSHMAN returned thanks on the part of the Council, and observed that their labours in the past year had not been as heavy as they could have wished. He remarked that if the ardour which was once felt in the pursuit of Oriental literature, and which was exhibited twenty or thirty years ago, could be revived, the Society's publications would not present so unfavourable a contrast to the Journals of kindred Societies on the Continent and in America, to which the Report of the past year had adverted with so much regret.

Lord Viscount STRANGFORD moved the following resolution, which was seconded by the Rev. R. E. TYRWHITT, and carried unanimously :—

“That the thanks of the meeting be returned to the Treasurer, Secretary, and Librarian, for the discharge of the duties of their respective offices.”

MR. NORRIS, the Secretary, said that, in the absence of the Treasurer, who was away in consequence of a domestic affliction; and of the Librarian, who was now residing in the country, he was desirous of expressing, in their names and his own, an acknowledgment of the vote passed in their favour.

J. W. PYCROFT, Esq., having been appointed Scrutineer, the Meeting proceeded to elect Members to fill the vacant offices of the Society, and for the Council for the ensuing year.

The result of the ballot was declared as follows:—

Colonel W. H. Sykes, M.P., *President*. Lieut.-Colonel Sir Henry C. Rawlinson, K.C.B., M.P., *Vice President*; Professor H. H. Wilson, *Director*; R. Clarke, Esq., *Treasurer*; Edwin Norris, Esq., *Secretary*; John Shakespear, Esq., *Librarian*.

Council: A. Ashpitel, Esq.; N. B. E. Baillie, Esq.; J. W. Bosanquet, Esq.; Lieut.-General Briggs; W. J. Eastwick, Esq.; Colonel G. Everest; James Fergusson, Esq.; Samuel Gregson, Esq., M.P.; the Right Hon. Holt Mackenzie; John C. Marshman, Esq.; Henry T. Prinsep, Esq.; Colonel Sir Justin Sheil, K.C.B.; Lord Viscount Strangford; Edward Thomas, Esq., and W. S. W. Vaux, Esq.

ABSTRACT OF RECEIPTS AND DISBURSEMENTS, from 1st January to 31st December, 1857.

RECEIPTS.			DISBURSEMENTS.		
	£	s. d.		£	s. d.
192 Subscriptions of Resident Mem- bers, at 3 <i>l.</i> 3 <i>s.</i>	415	16 0	House Rent one Year, deducting Property Tax.....	270	13 4
16 ditto, Original Members, at 2 <i>l.</i> 2 <i>s.</i>	33	12 0	Assessed Taxes.....	29	3 10
34 ditto, Non-Resident Members at 1 <i>l.</i> 1 <i>s.</i>	35	14 0	Parochial Rates.....	23	7 8
Arrears of Subscription paid up ...	15	15 0	Water Rate.....	5	19 0
			Fire Insurance on House.....	5	12 6
				£339	16 4
Compositions of Subscription.....	£500	17 0	House Expenses and Housekeeper's Wages.....	63	7 0
Annual Donation of East India Company.....	36	15 0	Coals and Gas.....	14	15 9
Dividends on Consols.....	210	0 0			
Publications sold.....	51	12 4	Salaries and Collector's Poudage.....	78	2 9
	50	15 4	Printer for Journal vol. 16, pt. 2, &c.....	256	12 0
				100	11 1
In Bankers' hands, end of 1856.....	£849	19 8	Diplomas for Kings of Siam....	12	15 6
	214	9 1	Repairs of House.....	6	8 8
			Books, Binding, and Periodicals..	10	12 11
			Stationery, 1 <i>l.</i> 6 <i>s.</i> 3 <i>d.</i> ; Postage, &c., 10 <i>l.</i> 12 <i>s.</i> 11 <i>d.</i>	21	19 2
			Miscellaneous and petty cash in hand.....	25	11 0
				77	2 3
				£852	4 5
			Balance in Bankers' hands 31st December, 1857	212	4 4
				£1064	8 9

[Assets, 1,806*l.* 19*s.* 5*d.* Three per Cent. Consols.]

ROYAL ASIATIC SOCIETY.

PROCEEDINGS

OF THE

THIRTY-SIXTH ANNIVERSARY MEETING OF THE SOCIETY,

Held on the 14th May, 1859,

COLONEL SYKES, M.P.,

PRESIDENT,

IN THE CHAIR.

AFTER the presentation of some donations to the Library, and the election of E. S. POOLE, Esq., as a Resident Member, the following Report was read by the Secretary:—

Although the Council do not congratulate the Society upon any material improvement in its condition or prospects during the past year, nevertheless a continued activity has been maintained in its proceedings by occasional Lectures of great interest, and by valuable communications embodied in a volume of the Journal which is now before the Meeting.

The accessions to the Society's numbers are the same as in the last year; but the deaths and retirements taken together amount to two more than at that period. The following is a detailed statement of the elections, retirements, and deaths, since the last Anniversary:—

Elections, Resident and Non-Resident Members:

1. The Right Honourable Lord Stanley, M.P.
2. Farquhar Matheson, Esq.
3. Professor John Dowson.
4. The Reverend George Small.
5. Captain Lewis Pelly.
6. The Reverend Francis Mason, D.D.
7. Cotton Mather, Esq.

8. The Reverend John Davies.
9. William de Normann, Esq.
10. Edmund Calvert, Esq.
11. Edward Stanley Poole, Esq.

Election of Honorary Member :

1. Professor Gustavus Fluegel.

Retirements :

1. Dr. James Bird.
2. Welby Jackson, Esq.
3. T. S. Rawson, Esq.
4. The Honourable F. Walpole.
5. Samuel Cartwright, Esq.
6. Lieutenant-Colonel W. Hough.
7. Sir John S. Login.
8. L. R. Reid, Esq.
9. T. J. Turner, Esq.

Deaths, Resident and Non-Resident Members.

1. The Earl of Ripon.
2. John Shakespear, Esq.
3. John Romer, Esq.
4. John Shepherd, Esq.
5. Sir Henry Willock.
6. Charles MacFarlane, Esq.
7. The Baron de Goldsmid.

Death of Foreign Member :

Baron Alexander von Humboldt.

In reference to the subject of retirements from the Society, the Council deem it due to DR. HUGH FALCONER, to state that, in consequence of some misconception on his part as to his liability for subscription while in India, and the apparent miscarriage of the Society's letters intimating its claims upon him, his name was struck off the List of the Society, in the ordinary course, in accordance with the provisions of the Society's Regulations. But on the circumstances becoming known to Dr. Falconer on his return to this country, he immediately tendered the full balance of the subscription due by him, and he therefore stands on the footing of a member who has voluntarily retired.

Amongst the names on the obituary, one that especially claims the regret of the Society is that of MR. JOHN SHAKESPEAR, who was one of the original Members by whom the Society was instituted in 1823, and who continued to take a warm interest in its proceedings to the time of his death, which took place in July last, at the ripe age of eighty-four. Mr. Shakespear, in addition to the proof he afforded of his interest in the Society by frequent attendance at the Meetings, held for some years past the Honorary Office of our Librarian.

It is, however, with respect to his long and learned labours in the cultivation of the Hindustani language, and the important aids he has contributed to its acquirement, that Mr. Shakespear is entitled to the gratitude of all future students of that language; and his case affords a very remarkable proof of what may be accomplished by ability and assiduity, under the most discouraging circumstances. From a short autobiographical notice, with which we have been favoured by his nephew and heir, C. Bowles, Esq., we learn that Mr. Shakespear was born at a small village called the Lount, in the parish of Staunton Herald, in the county of Leicester, in August, 1774. His father rented a small farm, but died when his eldest son was about eleven years old, leaving seven children dependent on the exertions of their mother, who, by "rare domestic industry, and attention to the farm, brought them up in a becoming manner." The means of educating them were necessarily imperfect, and John Shakespear received his first instructions in the parish school. From this he was removed to a preceptor of a somewhat higher order, and thence to a clergyman who kept a school at a distance of three miles from the village. With this gentleman he remained two years, and acquired his good opinion to such an extent that he recommended him to the favourable notice of the Lord of the Manor, afterwards the Marquis of Hastings. This nobleman, with his characteristic generosity, interested himself in the young scholar's fortunes; and contemplating some mission to Northern Africa, in which the youth was willing to engage, provided him with the requisite means, and sent him to London to learn Arabic, where, with the aid of what he terms a nominal teacher, but still more, of Richardson and Golius, he obtained, he says, some acquaintance with the written Arabic. This acquaintance he extended by subsequent application; and he was, in truth, a very respectable Arabic scholar.

The destination of the young scholar was changed about 1792, and his patron, Lord Rawdon, placed him in a situation in the Commissariat of the force intended to invade France, purposing to give him a Commission. This, however, was not effected; and from the

end of 1796 to 1805, Mr. Shakespear describes himself as having led an idle life. He must, however, have continued his studies, and acquired some credit for them, as, upon the occurrence of a vacancy in the Oriental Professorship at the Royal Military College, he obtained the support of Lord Teignmouth, Dr. Gilchrist, Dr. Jonathan Scott, and Mr. Wilkins, and was appointed Professor. From Dr. Gilchrist also he received instruction in Hindustani, which thenceforth became his especial province; as, about two years afterwards, he was made Hindustani Professor at the College of Addiscombe, which the East India Company had then established for the separate Military education of their Cadets; an appointment he held for twenty-three years, retiring at the end of 1830.

When Mr. Shakespear first undertook to give instruction in Hindustani, elementary works upon that language were unpublished in this country. The works of Dr. Gilchrist were at that time confined to the College of Fort William, and rarely found their way to England. The deficiency was too palpable not to require provision; and Mr. Shakespear accordingly prepared and published, in 1812, a "Grammar of the Hindustani Language," which for many years constituted the sole key to the language, and is still in use, having passed through six editions, the last dated in 1855. It is a clear, simple, and comprehensive work, and fully adequate to its object; although in some degree supplanted by more comprehensive, or more concise works.

The Grammar was promptly followed by a volume of "Selections," to serve as a series of reading lessons, a great portion of which consists of excellent examples of Hindustani idiomatic narratives, and the rest of extracts from a standard work, the "Araish Mahfil,"—a description of Hindustan.

These formed, for many years of the existence of the College of Haileybury, the elementary studies of the Company's junior civil servants, and are still in use at Addiscombe. A second volume of the "Araish Mahfil" was afterwards printed by Mr. Shakespear, in which much valuable topographical description is contained, though in rather an exaggerated style. At a later date Mr. Shakespear, as he states, at the suggestion of the Chairman composed and published a very serviceable work,—"Introduction to Hindustani," which included grammar, reading exercises, dialogues, and other matters, so as to supply the student with all that was essential to his proficiency, in the compass of a single volume.

The work, however, on which Mr. Shakespear's reputation as a Hindustani scholar is based, is his Dictionary, the last edition of which leaves nothing to be desired. The first edition, published in

1816, was, as he states, little more than a revise of a Dictionary published in Calcutta by Dr. Hunter, who died at Java in 1812, and which was little else than a publication of a manuscript work of a Captain Taylor, of the Bengal Army. However useful, the Dictionary was very far from complete; and, four years afterwards, a second edition appeared, very much enlarged and improved. Two other editions afterwards appeared,—the last in 1849, which must ever remain the standard authority for Hindustani. In addition to the ample materials he had himself collected, Mr. Shakespear had the use of the valuable manuscript collections of Dr. Harris of Madras, and part of the library at the India House.

The literary labours of Mr. Shakespear were chiefly philological; but the Journal of the Society contains some contributions from his pen. A more important work was his contribution to the "Introduction to the Arabian Antiquities of Spain,"—a publication remarkable for its illustrations of Arabic architecture. Mr. Shakespear's share in the "Introduction" was a translation from the "*Nahfat-al-Tib*," a work by Al Makri, descriptive of Andalusia, or Spain.

The circulation of Mr. Shakespear's Hindustani publications, as they were for so many years the only ones available, was very large. According to particulars stated by himself, he printed 11,500 copies of his Grammar, 10,500 of his Selections, and 8,750 of his Dictionary. As the prices were heavy, the profits were very considerable; and as he retained the property in his own hands, being his own publisher, and being a person of singularly frugal and self-denying habits, he realized from these and other sources a very handsome property, which he invested in an estate in his native county, named Langley Priory, to which he has been succeeded by his nephew, who was for many years also Assistant, and finally Professor of Hindustani at Addiscombe.

Mr. Shakespear was of an unassuming and cheerful, though retiring disposition, and enjoyed the respect and regard of all who knew him. Although recommended to this Society as an Orientalist, he is not without claims upon more popular consideration, as towards the close of his life he became a very liberal contributor to the funds raised for the preservation of the reliques of his namesake's habitation at Stratford-upon-Avon.

By the death of SIR HENRY WILLOCK, which occurred in August last, the Society has lost one of its early Members, and a sincere friend and well-wisher, though his important public duties and his residence out of London, did not allow of his frequent appearance at

their meetings. Sir Henry went to India as a Cadet of Cavalry on the Madras Establishment, in 1804, and resigned the service in 1834. His familiar acquaintance with Persian led to his early employment as interpreter and officer in command of the escort of Sir Harford Jones, Her Majesty's Envoy Extraordinary to the Court of Persia, whose successor, Sir Gore Ouseley, found his services of great value as Persian Secretary. His intelligence, knowledge of the language, conciliatory manners, and exemplary conduct, public and private, led, in 1815, to his being placed in charge of the British Mission at the Court of Tehran, in which charge he continued till the latter end of 1826, with the entire and repeatedly expressed approbation of the Governments of His Majesty and of the East India Company. In that year, His Majesty Futtah Ali Shah, King of Persia, honoured Mr. Willock with the decoration of the First Class of the Order of the Lion and Sun, of which his own Sovereign sanctioned his acceptance, adding to it, in 1827, the further honour of British knighthood. In 1835, Sir Henry Willock was elected a Director of the East India Company. He was Chairman in 1846-7, and continued an able, upright, and honoured member of that body till its extinction, on the transfer of the administration of Indian affairs to the direct authority of the Crown. Not only was the discharge of his important functions as a Director marked by sound judgment, diligent exertion, and unvarying independence, but the noble patronage which fell to his lot was habitually disposed of with a view to secure valuable officers for the public service ; while his unsolicited and unexpected presentations frequently imparted happiness to the desponding, or rewarded unobtrusive or neglected merit. Having formed a favourable opinion of the Proprietary School of Kensington, with which he was locally connected, as, in his judgment, peculiarly suited by its courses of military mathematics to lay the most solid foundation on which to raise the superstructure of the Addiscombe education, he presented to it annually from 1842, an Addiscombe nomination to be competed for ; and the result was found to attain Sir Henry's object ; for of those nominees who have completed the terms of study, and have gone forth from the East India Company's Military Seminary, one only has hitherto failed to obtain the high prize of nomination either to Engineers or Artillery. It was remarked, however, that Sir Henry Willock never intimated an intention of making these presentations continuous ; but announced them severally, and only after, in each case, ascertaining the result of the previous candidate's examination.

During his residence in Persia, Sir Henry formed a collection of the coins of the Arsacidan and Sassanian, as well as more

modern dynasties, which he presented to the Cabinet of the India House Library. The collection is not very extensive, but is well chosen, and the Sassanian especially is considered as of singular variety and value.

Sir Henry died in the sixty-ninth year of his age, after a life of usefulness, honour, and domestic felicity.

From an early period of his life, CAPTAIN JOHN SHEPHERD was connected with the maritime service of the East India Company. He was born in Aberdeenshire in 1792, and by the time he had reached his majority was third officer of the "Europe," a vessel chartered by the Company for the India trade. In 1818, we find him second officer of the "Duke of York," also a Company's chartered ship, of which he took the command in 1821. He relinquished his command in this ship in 1826, finally retiring from the Navy.

Captain Shepherd's public services as a member of the late Honourable Court of Directors of the East India Company (to which he was elected in 1835) are well known, and were deservedly appreciated by his colleagues, as is evidenced by his having been thrice elected Chairman of the Court; on one occasion, immediately after vacating the office by rotation. His membership of the Society dates from the year in which he became a Director. In 1850, during his Chairmanship of the Company, he did the Society the honour of presiding at its Anniversary, and in his address to the Meeting, expressed the most lively interest in the success of the Institution, remarking, that although not an Oriental scholar himself, nor able to assist in its labours, he was fully aware that it was accumulating most useful information relating to India, which might prove of the utmost value in legislating for the people of that great country.

CHARLES MACFARLANE, Esq. was first known to the public by his "Constantinople in 1828," a volume in which he portrayed the conditions of the capital of the Ottoman Empire, and of some of its principal cities, then seriously menaced by the Russians.

He was the author of several works on a variety of subjects, mostly historical compilations, which were distinguished by a pleasing style, and a lucid arrangement of facts. Many of these appeared in serial publications, without the name of the writer. The Council would notice, as appertaining to the objects of the Society, an epitome of the history of British India, entitled "Our Indian Empire," published in 1844, a popular work, with numerous illustrations. The "History of British India," which brought the narrative down to the annexation of the Punjaub, was published in one volume, without illustrations, in the year 1854.

Mr. MacFarlane's "Japan," published in 1852, when the expedition was in preparation which has since partially opened that long concealed country, affords a compendium of almost all that was known of that remote region ; and it is hardly now superseded by the publications that have since appeared on the same subject.

Among the additions to the Society's Library since our last annual meeting ; one, a donation received from the Court of Directors of the East India Company, deserves especial mention. It consists of a large collection of official records, compiled by officers of the Civil and Military Service of the Company, and printed at the expense of the Government, within the last few years.

These documents contain extensive and varied information on many important subjects connected with British India ; supplying copious details on the moral, political, and industrial condition of the various provinces, and communicating valuable statistical and scientific information of the public works, manufactures, produce, commerce, and geography of the whole country. Many of these volumes are accompanied by maps, illustrations, and elaborate tables, the whole supplying information not to be met with elsewhere, and affording evidence of the efforts made by the Company to promote the welfare of the natives of India.

For an interesting accession to its Museum, the Society is indebted to R. Scott, Esq., of the India Uncovenanted Civil Service, who has presented two boxes of articles from Abyssinia, collected in the country during the mission of Sir William C. Harris, fifteen years ago, under whom Mr. Scott held a distinguished place. The articles consist of dresses, arms, jewels, and other ornaments used by the Abyssinians and by the intrusive Gallas.

The fac-similes of the Assyrian inscriptions in the British Museum, prepared under the superintendence of Sir Henry Rawlinson at the cost of Government, are now being issued to the extent of seventy sheets. The series of these fac-similes is now before the meeting ; it begins with the inscriptions on a considerable number of ancient Chaldean bricks, of the period preceding the establishment of the Assyrian monarchy. Of these the earliest may perhaps date 2,000 years before Christ. The rest are chiefly historical documents of the Assyrian and Babylonian Sovereigns, from Tiglath Pileser I, B.C. 1150, down to Nabonidus, in the 6th century, B.C.

The appointment of Sir Henry to the embassy of Persia will necessarily retard the appearance of the remaining portion of the

series selected by him for publication, a delay that will be regretted by the philological student, to whom the language itself is of great interest in its relations to the other Semitic idioms, independently of the historical information conveyed in it. This portion will consist of mythological catalogues, syllabariums, grammatical formulae, classified lists of objects, and a number of other tabular documents engraved or impressed on the terra-cotta slabs in the British Museum, which are of the utmost importance to the study of the ancient languages of Assyria. These, may, in fact, be considered as grammars and dictionaries, compiled while the languages were yet vernacular, and although many of them have been already examined with good results, there are great numbers still remaining to reward future research.

A most valuable contribution to our Himyaric knowledge has been recently furnished by Brigadier Coghlan, British Resident at Aden. This officer, having casually heard of the discovery of a number of inscribed copper-plates at Amran, near Sanâa, in Southern Arabia, at once put himself into communication with the finders, and after some negotiation succeeded in obtaining possession of the entire collection, with the exception of two plates, which were lost or stolen on the transit to Aden. A cast of one of these plates was immediately sent over by Brigadier Coghlan to Sir Henry Rawlinson, who exhibited it at a Meeting of the Society on the 22nd January last; and at the same time read a translation of the inscription.

Photographic copies of the whole series of these Himyaric inscriptions, numbered from 1 to 26, have been since received by Sir Henry Rawlinson from Brigadier Coghlan, and are now in the hands of the lithographer. The inscriptions are, for the most part, quite perfect, and so well preserved that very few characters are subject to doubt; a most important aid being thus afforded to Himyaric students, who have hitherto had nothing to consult but corrupt and mutilated documents.

The entire series of these Himyaric Inscriptions, with transcripts in the Arabic character, and translations in English by Sir Henry Rawlinson, will be published in the next issue of the Society's *Journal*.

That the inscriptions date from a period anterior to Islam, is proved by the innovations which they contain to the divinities of the Pagan Arabs, but their precise chronological position has not yet been ascertained.

The Committee of the Oriental Translation Fund, during the past year, have assisted by their patronage the publication of two works

printed at Paris, namely, the "Chronique de Matthieu d'Edesse," translated from the Armenian, by Professor E. Dulaurier, and the second volume of "Mémoires sur les Contrées Occidentales," par Hiouen Tssang, translated from the Chinese by M. St. Julien, of the geographical results of which the Journal of the Society contains a full notice. The "Chronique de Matthieu d'Edesse" presents some curious materials for history, derived from a source which is but rarely attainable.

They have also published the "Kitab i Yamini," translated from the Persian version of "Al Utbi" by the Rev. James Reynolds, a work of considerable interest in reference to the history of the founders of the Ghaznavide dynasty.

In addition to the preceding, the Committee have very recently published the seventh and concluding volume of "Haji Khalifa Lexicon," upon which the editor and translator, Professor Gustavus Fluegel, has been engaged nearly a quarter of a century.

The publication of this great work has cost the Oriental Translation Fund nearly £4,000; and its completion must be a matter of congratulation to the Oriental and general scholar.

The Council of the Society, in order to express their high appreciation of the value of Professor Fluegel's labours, have recently placed that gentleman's name on the list of Honorary Members of their body.

AUDITORS' REPORT.

OSMOND DE BEAUVOIR PRIAULX, Esq., read the following Report of the Auditors.

"The Auditors have to report that they have duly examined and tested the Financial Accounts of the Society for the past year, and have found them correctly rendered. .

"It will be seen by the accompanying abstract that the total receipts of the year 1858, amount to £823, as against the sum of £850 of the preceding year; the diminution being chiefly caused by the decreased sale of the publications of the Society, represented by the total of £20 for 1858, as opposed to the £51 received from the same source in 1857. This falling off is readily accounted for by the delay that has been found necessary in the publication of the Society's Journal,—a temporary loss which may be expected to correct itself on the issue of the numbers of the Journal, now fully completed, or under immediate preparation.

"In like manner the falling off, during the latter of the two years, under comparison, in the items of subscription and arrears paid up, is more than balanced by the relative increase of the amount paid for compositions; though the number of annual subscriptions has certainly fallen somewhat below the average.

"The receipts, then, from all sources, were £823 1s. 5d., which, added to the balance brought forward at the end of 1857, give a total of £1,035 5s. 9d., leaving a balance of £288 7s. 10d. in hand at the end of the year, or nearly £80 more than the yearly balance of 1857. This apparent increase, as has been already noticed, is referable chiefly to the small amount paid for printing expenses in 1858.

"The grant of £1,000 by the Government in 1851-2, for the publication of the Rawlinson Papers, the balance of which, as shown in last year's accounts, amounted to £142 18s. 1d., will probably be nearly exhausted at the close of the present year by the outlay for papers already printed and in preparation, of which no accurate estimate can yet be formed.

"HENRY LEWIS,	} Auditors on the part
"O. DE BEAUVOIR PRIAULX,	
	} of the Society.

"EDW. THOMAS, Auditor on the part of the Council.

"London, 10th May, 1859."

After the reading of the foregoing reports, the following resolution was proposed by the Rev. Dr. HOOLE, seconded, and carried unanimously:

"That the Reports of the Council and Auditors be received and printed; and that the thanks of the Society be voted to the Auditors for their examination of the Society's Accounts."

VISCOUNT STRANGFORD rose to move a vote of thanks to the President of the Society. He said, it was quite unnecessary to go into detail, because the Society at large could testify fully to the zeal and ability with which Colonel Sykes had fulfilled the duties of his high office. That gentleman, since his election to the office, had not once missed a meeting of the Council, or of the Society generally, notwithstanding the many calls upon his time, and the Society was advancing in usefulness from his indefatigable energy. His Lord-

ship concluded by stating his persuasion that "their progress would be continued, and moved—

"That the best acknowledgments of the Society are due to the President for the active interest taken by him in the welfare of the Society, and for his unremitting attendance at its meetings."

Seconded by SIR JUSTIN SHEIL, and carried unanimously.

Mr. CLARKE said, that it afforded him very sincere pleasure to propose the resolution entrusted to him, which was—

"That the Society again express its deep obligation to the Director, Professor Wilson, for his valuable communications, and for his general services in the promotion of the objects of the Society."

In submitting this for the concurrence of the meeting, if it had been incumbent upon him to do justice to the infinitely valuable services rendered by Professor Wilson to the cause of Eastern science and learning, he must at once have renounced a task so far exceeding his own powers; but Mr. Wilson's profound knowledge of Sanscrit,—the key to treasures yet unexplored, his incalculably valuable labours for the assistance of all explorers of those inexhaustible mines,—his researches into the history, chronology, and geography of Asia,—his beautiful and tasteful renderings of singularly interesting specimens of the drama, as well as of the epic poetry of the Hindus, have earned for him world-wide fame and honour; and it would be presumptuous in him to dilate upon them before the present assembly. He would only, therefore, observe that this Society might well be proud of having such a man for their Director, and will be forward to acknowledge his readiness at all times to make his talents and his vast acquirements of avail and benefit in promoting the objects of the Society. He begged to move the resolution which he had read to the meeting.

The above resolution was duly seconded, proposed from the Chair, and carried unanimously.

The Director, in acknowledging the vote of thanks for his services, expressed the satisfaction he derived from the manner in which they were always accepted by the Society. He apprehended that they were more favourably appreciated than they deserved, as after the many years which he had been connected with the Society, his colleagues would expect and excuse some failure of activity and exertion. He was not conscious, however, of diminished interest; and as long as he was able he should ever be willing, as far as lay in his power, to promote the objects and credit of the Society.

It was moved by E. C. RAVENSHAW, Esq., seconded by JOHN C. MARSHMAN, Esq., and carried unanimously :—

“That this meeting tender its best thanks to the Vice-Presidents and Council of the Society, for the attention they have given to the affairs of the Institution during the past year.”

Mr. Marshman observed, that our gratitude for past benefits is always quickened by the expectation of future favours. The remark on the present occasion was most appropriately applicable to one of the gentlemen included in the vote of thanks to the Council and Vice-Presidents. To the Journal of the Society Sir Henry Rawlinson, had been one of the most valuable contributors. To him the Society had been indebted for articles of rare value, and universal interest. He had now been selected to represent our gracious Sovereign, and to promote the interests of this country at the Court of Persia ; and it would be difficult to discover any public man better qualified to do justice to this responsible office. We now looked to him for a continuation of his former kindness ; and are confident that in the sphere of his diplomatic labours, filled as it is with objects of the deepest interest, he will not forget this Society, but from time to time enrich its publications with the result of those important researches, prized equally by the archæologist and the Christian, the prosecution of which he would now be able to resume.

Sir Henry Rawlinson, returning thanks in the name of the Vice-Presidents and Council for the vote passed, said that he might honestly assert that all had done their duty, each according to his ability. He wished further to observe, in reply to the personal remarks which had been made, that he owed much to the Society, and any thing he could do in return would be but the repayment of a debt. He was the *alumnus* of the Society, and he looked upon it with a filial regard, for it was the countenance he had received from it, at an early period of his career, that had induced him to persevere in studies which might otherwise have been merely desultory efforts. These studies he had followed up, and they had led to results which he hoped were not devoid of interest and usefulness. He regretted, on some points, that he was about to leave England for a time, but he hoped it would not be for long ; and the position he was about to occupy would, he thought, enable him to be more useful to the Society's objects than if he stayed at home. He would be able, at any rate, to get possession of MSS., coins, relics, and inscriptions ; and the experience he had gained in Europe, since he left the East, would be invaluable to him in his researches on returning to it. He

proposed to keep up his correspondence with the Society ; and he hoped to turn it to good account.

Moved by ROBERT HUNTER, Esq., seconded by J. W. BOSANQUET, Esq., and carried *nem. con.*:—

“That the thanks of the Society be given to the Treasurer, Librarian, and Secretary, for the zealous fulfilment of the duties of their respective departments.”

The Treasurer and Secretary briefly acknowledged the vote.

A ballot was then taken for the election of Officers and Council of the Society for the ensuing year ; the result was declared as follows :

Director.—Professor H. H. Wilson ;

Treasurer.—Richard Clarke, Esq. ;

Secretary.—Edwin Norris, Esq. ;

Librarian.—W. H. Morley, Esq. ;

Council.—J. W. Bosanquet, Esq. ; Lieutenant-General Briggs ; Sir Thomas Edward Colebrooke, Bart., M.P. ; Colonel Everest ; James Fergusson, Esq. ; the Right Hon. Holt Mackenzie ; J. C. Marshman, Esq. ; Osmond de Beauvoir Priaux, Esq. ; Henry T. Prinsep, Esq. ; E. C. Ravenshaw, Esq. ; Colonel Sir Justin Sheil, K.C.B. ; William Spottiswoode, Esq. ; the Right Hon. Lord Viscount Strangford ; W. S. W. Vaux, Esq., and J. P. Willoughby, Esq.

The PRESIDENT, in thanking the meeting for the vote they had passed in his favour at an earlier period of this day's proceedings, said, that however much he might feel himself wanting in the knowledge and acquirements that might be deemed essential to the position he had been placed in by the indulgence of the Society, he could honestly declare that he was not deficient in earnest desire to render the labours of the Society advantageous to India, which advantage could best be effected by the Society's assisting to dispel that ignorance of everything relating to India which unhappily was so prevalent and so profound in the people of England, and which did often render useless, and even injurious, the best intentions and measures of the friends of the Hindus. If the information gathered here was confined within the four walls of the Society's Meeting Room, or limited to the narrow circulation of a scientific Journal, the usefulness of the Society must necessarily be circumscribed ; and it seemed to him that the interests of the Society, and the advantage of the people of India, would be promoted by the active Members of the Society striving more than at present to induce

the conductors of the public Journals to print abstracts of papers communicated to the Society in anticipation of their appearance in extenso in the Society's Journal. In this way public attention would be invited to Asiatic matters, and the existing ignorance might be gradually removed.

The President then called the attention of the meeting to the numerous sheets of the lithographs of the important Assyrian inscriptions lying on the table, confirming Biblical History ; and pointed out that as duplicates of some of the inscriptions had been found with slight variations in the text, these variations had been inserted in the lithographic sheets before the meeting.

ABSTRACT OF RECEIPTS AND DISBURSEMENTS, from 1st January to 31st December, 1858.

RECEIPTS.		DISBURSEMENTS.	
	£. s. d.		£. s. d.
128 Subscriptions of Resident Members at 3 <i>l.</i> 8 <i>s.</i>	408 4 0	House Rent, one Year, deducting Income Tax ..	271 16 8
12 ditto, Original Members, at 2 <i>l.</i> 2 <i>s.</i> ..	25 4 0	Assessed Taxes	28 0 6
29 ditto, Non-Resident Members, at 1 <i>l.</i> 1 <i>s.</i>	30 9 0	Parochial Rates	15 12 6
Arrears of Subscriptions paid up	29 8 0	Water Rate	5 19 0
	£488 5 0	Fire Insurance on House	5 12 6
			£327 1 2
Compositions of Subscriptions	52 10 0	House Expenses and Housekeeper's Wages	60 19 9
Annual Donation of Council of India ..	210 0 0	Coals and Gas	14 14 6
Dividends on Consols	52 17 2		
Publications sold	19 9 3	Salaries and Collector's Poundage	75 14 3
	334 16 5	Printing and Lithography	236 12 0
	£323 1 5	Repairs to House	66 11 0
		Books, Periodicals, and Stationery	11 1 6
		Miscellaneous, deducting 12 <i>l.</i> 5 <i>s.</i> 6 <i>d.</i> advanced by Treasurer out of former balance in his hands	26 6 4
In Banker's hands end of 1857	212 4 4		13 11 8
		Balance in Banker's hands, 31 Dec. 1858	£746 17 11
			288 7 10
	£1,035 5 9		£1,035 5 9
[Assets, 1,806 <i>l.</i> 19 <i>s.</i> 5 <i>d.</i> Three per Cent. Consols.]			

LIST OF THE MEMBERS
OF
THE ROYAL ASIATIC SOCIETY
OF
GREAT BRITAIN AND IRELAND.

CORRECTED TO JULY, M.DCCC.LIX.

ROYAL ASIATIC SOCIETY.

Patron :

HER MOST EXCELLENT MAJESTY THE QUEEN.

Vice-Patrons:

HIS ROYAL HIGHNESS THE PRINCE CONSORT.
HIS MAJESTY LEOPOLD I., KING OF THE BELGIANS.
THE PRESIDENT OF THE INDIA BOARD.
THE CHAIRMAN OF THE HON. EAST INDIA COMPANY.

President :

COLONEL W. H. SYKES, M.P., F.R.S.

Director :

PROFESSOR H. H. WILSON, M.A., F.R.S.

Vice-Presidents :

THE RIGHT HON. SIR EDWARD RYAN.
SIR GEORGE THOMAS STAUNTON, BART., F.R.S.
THE HON. MOUNTSTUART ELPHINSTONE.
LIEUT.-COL. SIR HENRY C. RAWLINSON, K.C.B., F.R.S.

Council :

BOSANQUET, J. W., Esq.
BRIGGS, LIEUT.-GEN. J., F.R.S.
COLEBROOKE, SIR THOMAS EDWARD, BART., M.P.
EVEREST, COLONEL GEORGE, F.R.S.
FERGUSON, JAMES, Esq.
MACKENZIE, THE RIGHT HONOURABLE HOLT.
MARSHMAN, JOHN CLARKE, Esq.
PRIAULX, OSMOND DE BEAUVOIR, Esq.
PRINSEP, H. T., Esq.,
RAVENSHAW, E. C., Esq.
SHEIL, COL. SIR JUSTIN, K.C.B.
SPOTTISWOODE, WILLIAM, Esq.
STRANGFORD, THE RIGHT HON. LORD VISCOUNT.
VAUX, W. S. W., Esq.
WILLOUGHBY, J. P., Esq.

Treasurer:—RICHARD CLARKE, Esq.

Librarian:—W. H. MORLEY, Esq.

Secretary:—EDWIN NORRIS, Esq.

Honorary Members.

HIS MAJESTY FREDERICK WILLIAM THE FOURTH, KING OF PRUSSIA.

HIS ROYAL HIGHNESS PRINCE JOHN OF SAXONY.

HIS HIGHNESS NAWAB IKBÁL UD DAULAH BAHÁDUR.

THEIR MAJESTIES THE KINGS OF SIAM.

THE REVEREND ROBERT CALDWELL, B.A.

THE REVEREND R. SPENCE HARDY.

THE REVEREND EDWARD HINCKS, D.D.

PROFESSOR N. L. WESTERGAARD.

PROFESSOR GUSTAVUS FLUEGEL.

Members.

RESIDENT AND NON-RESIDENT.

N.B.—The marks prefixed to the name signify—

* Non-resident Members.

† Members who have compounded for their Subscriptions.

‡ Members whose Subscriptions are in abeyance during absence.

† HIS ROYAL HIGHNESS THE PRINCE CONSORT.

† HIS MAJESTY LEOPOLD I., KING OF THE BELGIANS, K.G.

ABERDEEN, the Right Hon. the Earl of, K.T., *Argyll House, W.*

*† AGA MAHOMED RAHIM SHIRAZI, *Bombay.*

*† AGA MAHOMED JAFFER, *Bombay.*

‡ ALEXANDER, Lieut.-Col. Sir James Edward, K.L.S., *Montreal.*

† ALEXANDER, Henry, Esq., *Belmont, Barnet, N.*

ALEXANDER, Robert, Esq., *Oriental Club.*

ALGER, John, Esq., 16, *Oakley Square, N.W.*

*† ALI MAHOMED KHAN, *Consul for the Ottoman Porte, Bombay.*

* ALISON, Charles, Esq., *Secretary to H. B. M. Embassy, Constantinople.*

ALVES, Colonel N., *St Helier, Jersey.*

ARBUTHNOT, Sir Robert K., Bart., 16, *Charlotte Square, Edinburgh.*

*† ARDASHEER CURSETJEE, Esq., *Bombay.*

*† ARDASHEER HOORMANJEE, Esq., *Bombay.*

† ARROWSMITH, John, Esq., 10, *Soho Square, W.*

ARTHUR, the Rev. W. A., *Wesleyan Mission House, E.C.*

ASHBURTON, the Right Hon. Lord, *Bath House, Piccadilly, W.*

ASHPITEL, Arthur, Esq., 2, *Poets' Corner, Westminster, S.W.*

† ASTELL, J. H., Esq., 41, *Eaton Place, Belgrave Square, S.W.*

- *AUBER, MONS. Alois, *Conseiller à la Régence, &c., &c., Vienna.*
†BABINGTON, B. G., Esq., M.D., F.R.S., 31, *George St., Hanover Sq., W.*
BAILLIE, N. B. E., Esq., 93, *Gloucester Terrace, Hyde Park, W.*
†BALFOUR, F. C., Esq., 2, *Brunswick Place, Cheltenham.*
BALL, Samuel, Esq., *Wolverley, Kidderminster.*
*BARTH, Dr. Henry, *Berlin.*
BASKERVILLE, Henry, Esq., *Crowsley Park, Hunts.*
*BATTEN, J. H., Esq., *Bengal C. S.*
†BAXTER, H. J., Esq., 3, *Garden Court, Temple, E.C.*
BAYLEY, W. Butterworth, Esq., 9, *Henrietta St., W*
*BAYLEY, E. C., Esq., *Bengal C. S.*
*BEAUFORT, W. Morris, Esq., *Bengal C. S.*
†BENSON, Robert, Esq.
*BERFORD, G. M. B., Esq., *Bengal C. S.*
|| BETTINGTON, Albemarle, Esq., *Bombay C. S.*
†BLAND, Nathaniel, Esq.
*†BOMANJEE HOERMANJEE, Esq., *Bombay.*
BOSANQUET, J. W., Esq., 73, *Lombard Street, E.C.*
†BOTFIELD, Beriah, Esq., M.P., F.R.S., *Norton Hall, Northamptonshire, and 5, Grosvenor Square.*
†BOWRING, Sir John, LL.D.
*BRANDRETH, J.E.L., Esq., *Bengal C. S.*
†BRIGGS, Lieut.-General John, F.R.S., *Oriental Club.*
BROUGHTON, the Right Hon. Lord, F.R.S., 42, *Berkeley Square, W.*
BROWN, Charles P., Esq., *East India U. S. Club.*
BROWNE, Maj.-Gen. W. J., *Morpeth, and E. India U. S. Club.*
*BUIST, G., Esq., LL.D., *Bombay.*
*BURN, Alexander, Esq., M.D., *Bombay Medical Establishment.*
*†BURNS, David Laing, Esq., *Bombay.*
†BURNEY, the Venerable the Archdeacon, D.D., F.R.S., *United University Club, Suffolk Street, S.W.*
*†BURTON, Capt. R. F., *Bombay Army.*
BUSH, Lieut.-Col. J. T., *E. India U. S. Club.*
BUTLIN, J. R., Esq., 21, *Bernard Street, Russell Square, W.C.*
†CABELL, Benjamin Bond, Esq., F.R.S., 52, *Portland Place, W.*
*†CALDWELL, Colonel Hugh, *late of the Bengal Army.*
CALTHORPE, the Right Hon. Lord, 33, *Grosvenor Square, W.*
*CALVERT, Edmund, Esq., *Constantinople.*
*CAMPBELL, George, Esq., *Bengal C. S.*

- CAPON, Maj.-Gen. David, C.B., 10, *Carlton Crescent, Southampton.*
- *CARMICHAEL, David F., Esq., *Madras C. S.*
- †CAUTLEY, Col. Sir Proby T., K.C.B., F.R.S., 31, *Sackville Street, W.*
- †CHASE, Lieut.-Col. Morgan, 31, *Nottingham Place, W.*
- †CLARK, Gordon, W., Esq., 52, *Queen Anne Street, W.*
- CLARKE, Richard, Esq., 13, *Notting Hill Square, W.*
- CLERK, Sir George R., K.C.B., *India Office, Leadenhall St., E.C.*
- †COLEBROOKE, Sir Thomas Edward, Bart., M.P., 87, *South Street, Park Lane, W.*
- *COMPTON, T. A., Esq., *Bombay C. S.*
- †COOPER, Charles Purton, Esq., LL.D., F.R.S., 12, *New Square, Lincoln's Inn, W.C.*
- †COURT, Major M. H., *Castlemans, near Maidenhead,*
- CRAWFORD, J. H., Esq., *Oriental Club,*
- †CRAWFORD, R. W., Esq., 71, *Old Broad Street, E.C.*
- CROSSE, the Rev. T. F., D.C.L., *Oriental Club, St. Leonards-on-Sea.*
- *†CRUTTENDEN, Captain C. J., *Indian Navy.*
- *†CULLEN, Lieut.-General William, *Pol. Resident, Travancore.*
- *†CUNLIFFE, Lieut.-Gen. Sir Robert H., Bart., C.B., *Bengal Army.*
- *CUNNINGHAM, Lt.-Col. A., *Bengal Army.*
- CURRIE, Sir Frederick, Bart., *Southborough, Kingston.*
- *†CURSETJEE ARDASEER, Esq., *Bombay.*
- *†CURSETJEE JAMSETJEE, Esq., *Bombay.*
- *†CURSETJEE RUSTOMJEE, Esq., *Bombay.*
- CURZON, A., Esq., 181, *Euston Road, N. W.*
- CUTHBERT, S. T., Esq., *Oriental Club.*
- *†DADABHOY PESTONJEE, Esq., *Bombay.*
- DAVIES, the Rev. John, *Walsoken Rectory, near Wisbeach.*
- †DAVIS, Sir John Francis, Bart., K.C.B., *Athenæum; Holywood, near Bristol.*
- *†DE HAVILLAND, Colonel Thomas Fiott, *Guernsey.*
- DE LA MOTTE, Lieut.-General Peter, C.B., 15, *Oraven Hill Gardens, Bayswater, W.*
- DENT, William, Esq., *Beckley Park, Bromley, Kent, S.E.*
- DICKINSON, Major-General Thomas, *Preston, near Brighton.*
- DICKINSON, John, Esq., Jun., *Abbot's Hill, near Watford.*
- †DICKINSON, Sebastian S., Esq., *Brown's Lodge, Stroud.*
- *DICKSON, C. H., Esq., *H. B. M. Consul, Sukoum Kalé,*
- DONALDSON, the Rev. J. W., D.D., *Cambridge, and Athenæum,*
- DOWSON, Professor John, *Staff College, Sandhurst, Wokingham,*

- †DRANE, Thomas, Esq., *Marychurch, Torquay, Devon.*
- †DRYSDALE, William Castellan, Esq., 26, *Austin Friars, E.O.*
- ||EARL, G. W., Esq., *Province Wellesley.*
- †EASTWICK, Captain Wm. J., 12, *Leinster Terrace, Hyde Pk., W.*
- †EASTWICK, E. B., Esq., F.R.S., *Athenæum, and 38, Thurloe Square.*
- *EDGEWORTH, M. P., Esq., *Athenæum.*
- EDMONSTONE, N. B., Esq., 31, *Sussex Gardens, Hyde Park, W.*
- ||ELLIOTT, Walter, Esq., *Madras C. S.*
- ELPHINSTONE, the Right Honourable Lord, *Governor of Bombay.*
- ELPHINSTONE, the Hon. Mountstuart, *Hookwood, by Godstone.*
- *ERSKINE, C. J., Esq., *Bombay C. S.*
- †EVEREST, Colonel George, F. R. S., 10, *Westbourne Street, W.*
- EWER, Walter, Esq., F.R.S., 8, *Portland Place, W.*
- †FARRER, James William, Esq., *Ingleborough, Lancaster.*
- FERGUSON, James, Esq., 20, *Langham Place, W.*
- ||FORBES, Charles, Esq., *Bombay C. S.*
- †FORBES, Professor Duncan, LL.D., 58, *Burton Crescent, W.C.*
- *FORBES, Alexander K., Esq., *Bombay C. S.*
- †FORBES, George, Esq., *Berkeley, Petersfield.*
- †FORBES, James Stewart, Esq., 3, *Fitzroy Square, W.*
- FOX, Sir Charles, 8, *New St., Spring Gardens, S.W.*
- FRASER, Charles, Esq., 38, *Conduit Street, W.*
- †FREDERICK, Lieut.-General Edward, C.B., *Shawford House, Winchester.*
- *FREELING, G. H., Esq., *Bengal C. S.*
- *FRERE, W. E., Esq., *Bombay C. S.*
- FROST, the Rev. George, M.A., 28, *Kensington Square, W.*
- ||GARSTIN, Lieut.-Col. Robert, *late of the Madras Army.*
- GAUSSEN, William, Esq., 12, *Montague Pl., Russell Square, W.C.*
- GILLETT, William Stedman, Esq., 37, *Upper Harley Street, W.*
- GOLDSTÜCKER, Professor T., *University College, London, W.C.*
- GOODFELLOW, Lieut.-General Samuel, 19, *Fitzroy Square, W.*
- GRAHAM, Cyril C., Esq.
- *†GREGORY, John, Esq., *late Governor of the Bahamas.*
- †GREGSON, Samuel, Esq., M.P., 32, *Upper Harley Street, W.*
- ||GEEY, the Right Honourable Sir Charles E.
- *GRIFFITH, R. T. H., Esq., M.A., *Benares.*
- ||GRINDLAY, Captain Robert Melville.
- †GUEST, Edwin, Esq., F.R.S., *Master of Caius College, Cambridge.*
- *HALE, F. H., Esq., *H.B.M. Vice-Consul, Foo-chow Foo.*
- †HALL, Richard, Esq., 92, *Eaton Place, S.W.*

- *HAMMOND, H. W., Esq., *Bengal C. S.*
HAMMOND, W. P., Esq., 74, *Camden Road Villas, N.W.*
- †HAUGHTON, Richard, Esq., *Ramsgate.*
HEATH, the Rev. D. I., *Brading, Isle of Wight.*
- †HEMING, Dempster, Esq., *Lindley Hall, near Nuneaton, Warwicksh.*
HENDERSON, James, Esq., *Oriental Club.*
HESSEY, the Rev. Francis, D.C.L., *Addison Rd., Kensington, W.*
- †HEYWOOD, James, Esq., F.R.S., *Athenæum.*
HILL, A. B., Esq., *Clapham Park, S.*
- †HOBHOUSE, H. W., Esq., *Brooke's Club, St. James's St., S.W.*
- *†HODGSON, Brian Houghton, Esq., *late of the Bengal C. S.*
- †HODGSON, David, Esq., *South Hill, Liverpool.*
HOGG, Sir James Weir, Bart, 4, *Carlton Gardens, S.W.*
- †HOLROYD, Thomas, Esq., 2, *Elm Court, Temple, E.C.*
HOOLE, the Rev. Elijah, D.D., *Sec. Wesleyan Missionary Society.*
- †HOPKINSON, Major-General, Sir Charles, K.C.B., 2, *King Street, St. James's Square, S.W.*
HORSFIELD, Thomas, Esq., M.D., F.R.S., *India Office, Leadenhall Street, E.C.*
- *HUGHES, T. F., Esq., *Oriental Secretary, H.B.M. Embassy, Constantinople.*
HUGHES, Capt. F., *Ely House, Wexford.*
- †HUNTER, Robert, Esq., F.R.S., *Southwood Lane, Highgate, N.*
HUTT, John, Esq., *Oriental Club.*
HUTT, Benjamin, Esq., *E. India U. S. Club.*
- *HYDER JUNG BAHADOOR, *Madras.*
- *JACOB, Colonel George Le Grand, C.B., *Bombay Army.*
JACKSON, John, Esq., M.D., 28, *George Street, Hanover Sq., W.*
- *†JUGONATHJEE SUNKERSETT, Esq., *Bombay.*
- *KEENE, H. G., Esq., *Bengal C. S.*
- †KENNEDY, R. H., Esq., 7, *Kensington Gate, Hyde Park, W.*
- †KERR, Mrs. Alexander.
KNIGHTON, Prof., W., M.A., Ph. D., *College, Ewell, Surrey.*
LANSDOWNE, the Most Noble the Marquis of, K.G., F.R.S.
Berkeley Square, W.
- *LANGMORE, Capt. E. G., *Bengal Army.*
LATHAM, Dr. R. G., F.R.S., *Greenford, Middlesex, W.*
- †LAW, J. S., Esq., *Oriental Club.*
- †LAWFORD, Edward, Esq.
- †LAWFORD, Henry S., Esq., M.A., *Austin Friars, E.C.*
LEAKE, Lieut.-Col. W. Martin, F.R.S., 50, *Queen Anna St., W.*

- LE MESSURIER, A. S., Esq., 26, *Connaught Square, W.*
 LEWIS, Lieut.-Col., John, 27, *Dorchester Pl., Blandford Sq., N.W.*
 LEWIS, Henry, Esq., R.N., *Oriental Club.*
 †LINWOOD, the Rev. William, *Birchfield, Handsworth, Birmingham.*
 LOCH, John, Esq., *Morden Park, Surrey, S.*
 LOEWE, Dr. L., M.S.A., Paris, 48, *Buckingham Place, Brighton.*
 LOW, Maj.-Gen. John, C.B., *Clath, Cupar, Fifeshire, N.B.*
 LUDLOW, Major-General J., *Oriental Club.*
 MACBRIDE, J. D., D.C.L., *Magdalen Hall, Oxford.*
 †MACDOUALL, Prof. C., M.A., *Queen's College, Belfast.*
 *MACFARLANE, Charles, Esq., *Bengal Army.*
 MACKENZIE, the Right Honourable Holt, 28, *Wimpole Street, W.*
 MACKENZIE, K.R.H., Esq.
 MACKENZIE, J. T., Esq., 69, *Lombard Street, E.C.*
 MACKILLOP, James, Esq., 11, *King's Arms Yard, E.C.*
 †MACKINTOSH, Eneas, Esq., 17, *Montague Square, W.*
 MACKINTOSH, Maj.-Gen., A. F., 7, *Tilney Street, W.*
 MACLEOD, J. Mac Pherson, Esq., 1, *Stanhope Street, Hyde Pk., W.*
 || MACPHERSON, Major S. C., *Pol, Agent, Gwalior.*
 *†M'NEILL, Sir John, G.C.B., F.R.S., *Athenæum.*
 †MACVICAR, John, Esq., *Manchester.*
 †MAOWHIETER, John, Esq., M.D., *Edinburgh.*
 †MADDOCK, Sir T. Herbert, *Union Club, Trafalgar Square, W.C.*
 *†MAHOMMED ALLAY ROGAY, Esq., *Bombay.*
 MALCOLMSON, J., Esq., *West Lodge, Campden Hill, W.*
 *†MANOOKJEE CURSETJEE, Esq., *Bombay.*
 MANNING, Mrs., 12A, *Sussex Gardens, Hyde Park, W.*
 †MARDON, Thomas Todd, Esq., 30, *Wimpole Street, W.*
 MARSHMAN, John Clarke, Esq., 7, *Palace Gardens, Kensington, W.*
 MARTIN, J. R., Esq., F.R.S., 71A, *Grosvenor Street, W.*
 *MASON, the Rev. Francis, D.D., *Tonghoo.*
 †MATHESON, Sir James, Bart., M.P., 13, *Cleveland Row, S.W.*
 MATHESON, Farquhar, Esq., *Oriental Club.*
 †MAUGHAN, Captain Philip, 87, *Melville Street, Edinburgh.*
 †MAULEVERER, W., Esq., 20, *Park Crescent, N.W.*
 MATHER, Cotton, Esq., *Assistant Oriental Professor, Addiscombe.*
 MAYER, J., Esq., F.S.A., 68, *Lord Street, Liverpool.*
 MELVILL, Philip, Esq., *India Office, Leadenhall Street, E.C.*
 *MELVILL, Col. P. M., *Bombay Army.*
 MILES, Maj.-Gen. W., *North Villa, Hanover Gate, Regent's Park, N.W.*

- MOFFATT, G., Esq., M.P., 103, *Eaton Square, S.W.*
 MONTEFIORE, Sir Moses, Bart., 7, *Grosvenor Gate, Park Lane, W.*
 †MOOR, Rev. A. P., M.A., F.R.G.S., *Subwarden of St. Augustine's College, Canterbury.*
 MOORE, Major John A., 19, *Portland Place, W.*
 MOORE, Henry, Esq., *Oriental Club.*
 MORLEY, William Hook, Esq., *Brompton, Sq., S.W.*
 *MOVAT, Fred. John, Esq., M.D., *Bengal Medical Service.*
 MUIR, John, Esq., D.C.L., 16, *Regent Terrace, Edinburgh.*
 *†MUNMOHUNDASS DAVIDASS, Esq., *Bombay.*
 *MURRAY, E. C. G., Esq., *Consul-General, Odessa.*
 *†MURRAY, the Honourable C. A.
 *NASSIF MALLOUF, M.
 †NEWMHAM, Henry, Esq., 116, *Jermyn Street, S.W.*
 NEWMHAM, Thomas, Esq., 24, *Chapel Street, Grosvenor Sq., W.*
 *NEWTON, Charles, Esq., *H.B.M. Consul, Rome.*
 *NICHOLSON, Sir Charles, Bart., D.C.L., *Australia.*
 NISBET, R. P., Esq., M.P., 17, *Devonshire Place, W.*
 *NORMAN, Wm. de, Esq., *First Attaché to H. B. M. Embassy, Pekin.*
 NORRIS, Edwin, Esq., 6, *Michael's Grove, Brompton, S.W.*
 *NORRIS, Henry MacFarlane, Esq., *Madras Army.*
 †NORTHUMBERLAND, His Grace the Duke of, *Northumberland House, Strand, W.C.*
 *†NOWROJEE JAMSETJEE, Esq., *Bombay.*
 *OGILVY, Thomas, Esq., *Bombay C. S.*
 *OUTRAM, Lieut.-Gen., Sir James, G.C.B., *Member of Council, Calcutta.*
 *OVERBECK, Dr. J. J., *Bonn.*
 ||PALMER, George, Esq., *Bengal C. S.*
 ||PARBURY, George, Esq.
 †PARKER, John F., Esq.
 PARRY, the Rev. W., M.A., *The Abbey, Romsey, Hants.*
 *PELLEY, Capt. Lewis, *Bombay Army.*
 PERRY, Sir Thomas Erskine, M.P., 36, *Eaton Place, S.W.*
 *PIRANI, Count Alexander, *Constantinople.*
 †PLATT, William, Esq., *Conservative Club, St. James's, S.W.*
 †POLLINGTON, the Right Honourable Lord Viscount.
 POLLOCK, Lieut.-Gen. Sir George, G.C.B., *Clapham Common, S.*
 POOLE, EDW. STANLEY, Esq., 4, *Berkeley Gardens, Campden Hill, W.*
 †PORCHER, Henry, Esq., *Park Corner, Hartford Bridge.*

- PRESTON, the Rev. Theodore, M.A., *Trinity College, Cambridge.*
 PRIAULX, O. De B., Esq., 18, *Carlton Villas, Maida Vale, W.*
 PRINSEP, H. Thoby, Esq., *Little Holland House, Kensington, W.*
 PYCROFT, J. W., Esq., F.S.A.
 RAVENSHAW, Edward Cockburn, Esq., *Oriental Club.*
 †RAWLINSON, Lieut.-Col. Sir H. C., K.C.B., F.R.S., D.C.L.
 REDHOUSE, J. W., Esq., 2A, *Garway Road, Bayswater, W.*
 REMINGTON, R. F., Esq., *Oriental Club.*
 †RENOUARD, the Rev. George Cecil, B.D., *Swanscombe, Kent.*
 REYNOLDS, the Rev. James, B.A., *Great Ilford, Essex, E.*
 REYNOLDS, Major P. A.
 †RICKETTS, Mordaunt, Esq.
 *ROBERTS, A. A., Esq., *Bengal C. S.*
 ROBERTSON, T. C., Esq., 68, *Eaton Square, S.W.*
 ROBINSON, the Rev. Thos., D.D., *Master's House, Temple, E.C.*
 ROBINSON, Mrs., *The Falls, Llandoga, South Wales.*
 ROLLAND, S. E., Esq., *Junior United Service Club.*
 ROTHERY, William, Esq., 10, *Stratford Place, Oxford Street, W.*
 RUSSELL, George Edward, Esq., 15, *Hyde Park Square, W.*
 *†RYAN, the Right Hon. Sir Edwd., 5, *Addison Rd., Kensington, W.*
 SALOMONS, D., Esq., 26, *Great Cumberland Place, Hyde Park, W.*
 *†SAMPSON, Lieut.-Col., Thos. Edm., F.G.S., *Oriental Club.*
 *SANDWITH, Dr. H., C.B.
 SELWYN, the Rev. W., B.D., *Cambridge.*
 *†SERAJ UL MULK BAHADUR, *Hyderabad.*
 SHAW, William A., Esq., *Wycombe Lodge, Campden Hill, W.*
 SHEIL, Col. Sir Justin, K.C.B., 13, *Eaton Place, S.W.*
 †SIGMOND, George Gabriel, Esq., M.D.
 SIM, Major-General Duncan, 11, *Craven Hill, Bayswater, W.*
 *SKENE, J. H., Esq., *H.B.M. Consul, Aleppo.*
 SMALL, the Rev. George, M.A., 76, *Lambs Conduit Street, W.C.*
 †SMITH, George, Esq., LL.D., F.A.S., M.R.S.L., *Trevu, Camborne, Cornwall.*
 †SMITH, Thomas Charles, Esq., 23, *Hanover Square, W.*
 SMITH, Newman, Esq., 34, *Great Cumberland Place, W.*
 †SPOTTISWOODE, Wm., Esq., 12, *James Street, Buckingham Gate, W.*
 †STANLEY, the Right Hon. Lord, M.P., 36, *St. James's Square, S.W.*
 *STANLEY, the Hon. H. E. J., *Secretary of Legation, Athens.*
 †STAUNTON, Sir George T., Bart., F.R.S., 17, *Devonshire St., W.*

- ||STEWART, John, Esq., *Pau, Lower Pyrenees.*
 STRACHEY, William, Esq., *Oriental Club.*
 STRANGFORD, the Rt. Hon. Lord Viscount, 19, *Mansfield Street, W.*
 †STUART, the Hon. Charles F., 20, *Norfolk St., Park Lane, W.*
 SYKES, Colonel W. H., M.P., F.R.S., 47, *Albion Street, W.*
 TALBOT, W. H. Fox, Esq., F.R.S., *Locock Abbey, Chippenham.*
 *TAYLOR, Major R. L., C.B., *Bombay Army.*
 †TAYLOR, Richard, Esq., *Red Lion Court, Fleet Street, E.C.*
 TEIGNMOUTH, the Right Hon. Lord, F.R.S., *Clifton, Bristol.*
 †THOMAS, Edward, Esq., *Oriental Club.*
 THOMAS, Henry H., Esq., 4, *Lansdowne Crescent, Bath.*
 †THOMPSON, Lieut.-Col. T. P., F.R.S., *Eliot Vale, Blackheath.*
 THORNSBY, Lieut.-Colonel Charles, *Oriental Club and Torquay.*
 THORNTON, Thos., Esq., 29, *Gloucester St., Belgrave Rd., S.W.*
 TOONE, Francis Hastings, Esq., 31, *Portland Place, W.*
 †TRANT, William Henry, Esq., *St. Anne's, Torquay.*
 ||TREVELYAN, Lieut.-Col. H. W., C.B., *Bombay Army.*
 *†TROYER, Captain Anthony, 55, *Rue de la Pépinière, Paris.*
 *TRUMPP, the Reverend Dr. E., *Peshawer.*
 †TURNER, Thos., Esq., 31, *Curzon Street, W.*
 TIBWHITT, the Rev. R. E.
 †URQUHART, David, Esq., *Riverside, Rickmansworth.*
 *VAN DRIVAL, M. l'Abbé, *Arras.*
 VAUX, W. S. W., Esq., *British Museum, W.C.*
 †VERNEY, Major Sir Harry, Bart., M.P., 32, *South St., Park Lane.*
 †VIVIAN, Sir Richard Rawlinson, Bart, F.R.S., *Athenæum.*
 †VIVIAN, R. H. S., Esq., F.R.G.S., *Conservative Club, S.W.*
 WADE, Colonel Sir Claude M., C.B., *Ryde, Isle of Wight.*
 †WARE, Samuel, Esq., F.S.A., 34, *Portland Place, W.*
 WATSON, Dr. J. Forbes, M.D., *India Office, Leadenhall Street, E.C.*
 †WAYTE, William, Esq., *Highlands, Calne, Wilts.*
 WEDDERBURN, Sir John, *Inveresk Lodge, Musselburgh, N.B.*
 WEYMOUTH, R. T., Esq., M.A., *Portland Villas, Weymouth.*
 †WHITE, General Martin, *Bath.*
 WHITE, John, Esq., *Oriental Club.*
 ||WILBRAHAM, Major Richard, *Gibraltar.*
 †WILKINSON, Robert, Esq., 22, *Cumberland Ter., Regent's Park, N.W.*
 WILKINSON, Lieut.-Col. Thomas, *Gravellye, Lyndfield, Sussex.*
 †WILLIAMS, Monier, Esq., A.M., 3, *Montpellier Terr., Cheltenham.*
 WILLIAMS, the Rev. H. G., *Preston Rectory, Lavenham, Suffolk.*

WILLIAMS, Major-General Sir Wm. Fenwick, Bart., M.P.,
Woolwich, S.E.

WILLOUGHBY, J. P., Esq., 18, *Westbourne Terrace, W.*

†WILLOCK, Major George, K.L.S., *Bath.*

†WILSON, Prof. Horace H., M.A., F.R.S., 14, *Up. Wimpole St., W.*

†WILSON, the Rev. John, D.D., *Bombay.*

†YATES, W. Holt, Esq., M.D., 5, *Sumner Terr., Onslow Sq., S.W.*

†YORK, His Grace the Archbishop of, 41, *Belgrave Square, S.W.*

Foreign Members.

[By the Regulations of the Society, as amended in 1850, no further additions can be made to the lists of Corresponding and Foreign Members; the elections being restricted to Resident, Non-Resident, and Honorary Members.]

- Professor Jacob Berggren, *Stockholm*.
 Professor George Henry Bernstein, *Breslau*.
 The Chevalier T. X. Bianchi, *Paris*.
 Professor Francis Bopp, *Berlin*.
 Baron de Cetto, *Bavarian Ambassador*.
 Professor F. B. Charmoy, *Toulon*.
 M. Alexandre de Chodzko, *Paris*.
 Professor Bernhard Doyn, *St. Petersburg*.
 Professor Garcin de Tassy, *Paris*.
 Professor William Freytag, *Bonn*.
 William B. Hodgson, Esq., *New York*.
 Washington Irving, Esq., *United States*.
 Monsieur E. Jomard, *Paris*.
 Professor Stanislas Julien, *Membre de l'Institut, Paris*.
 Mirza Alexander Kazem Beg, *St. Petersburg*.
 Professor J. G. L. Kosegarten, *Grätzwald*.
 Professor Christian Lassen, *Bonn*.
 Senhor Joaquim Jose da Costa de Macedo, *Lisbon*.
 Dr. Julius Mohl, *Membre de l'Institut, Paris*.
 The Chevalier César Moreau, *Paris*.
 Professor Charles Frederick Neumann, *Munich*.
 Monsieur Reinaud, *Paris*.
 Professor Charles Ritter, *Berlin*.
 Professor Gustavus Seyffarth, *Leipsig*.
 The Hon. Martin Van Buren, *United States*.

Corresponding Members.

[See Note, p. 13.]

Rutherford Alcock, Esq., *H.B.M. Consul, Canton.*
 M. le Chevalier E. G. Arbanère, *Paris.*
 Johannes Avdall, Esq., *Calcutta.*
 Lieut.-Colonel G. Balfour, C.B., *Madras Army.*
 The Hon. F. W. A. Bruce, *H.B.M. Consul-General, Egypt.*
 Archibald Campbell, Esq., M.D., *Darjeeling.*
 Dr. E. Carmoiy, *Brussels.*
 Dr. J. F. J. Cassel, *Paderborn.*
 Simon Casie Chitty, *Maniyagar of Putlam, Ceylon.*
 The Chevalier Clot-Bey, M.D., *Cairo.*
 Monsieur Court, *late of Lahore.*
 Monsieur N. D'Avezac, *Paris.*
 James Finn, Esq., *H.B.M. Consul, Jerusalem.*
 The Rev. D. J. Gogerly, *Colombo, Ceylon.*
 Professor J. Goldenthal, *Vienna.*
 C. Kelaart, Esq., *Staff Surgeon, Ceylon.*
 Maharaja Kali Krishna Bahadur, *Calcutta.*
 Niven Kerr, Esq., *H.B.M. Consul, Rhodes.*
 Francis C. McGregor, Esq.
 Colonel James Mackenzie, *Bengal Army.*
 W. H. Medhurst, Esq., *H.B.M. Consul, Foo-cheou-foo.*
 Signor G. Michellotti, *Turin.*
 Dr. A. D. Mordtmann, *Constantinople.*
 Professor F. Nève, *University of Louvain.*
 M. Cæsar Maria Noy, *Venice.*
 The Rev. P. Parker, M.D., *Canton.*
 Harry S. Parkes, Esq., *H.B.M. Consul, Amoy, China.*
 The Chevalier Etienne Pisani, *Constantinople.*
 Christian A. Rassam, *H.B.M. Vice-Consul, Mosul.*
 Raja Radhakant Deb, *Calcutta.*
 James Pringle Riach, Esq., *late of the Bombay Medical Service.*
 M. Augustus Sakakini, *Egypt.*
 Mir Shahamet Ali.
 The Rev. Mr. Thomson, *Beirut.*
 J. W. Walker, Esq.
 Richard Wood, Esq., *Consul at Tunis.*

Oriental Translation Committee.

PATRON:

HER MOST EXCELLENT MAJESTY THE QUEEN.

VICE-PATRON:

HIS ROYAL HIGHNESS THE PRINCE CONSORT.

Chairman.

Deputy-Chairmen.

The Honourable MOUNTSTUART ELPHINSTONE.

Professor HORACE HAYMAN WILSON.

Committee.

LORD ASHBURTON.
 BENJAMIN GUY BABINGTON, M.D.
 JAMES BIRD, Esq., M.D.
 BERIAN BOTFIELD, Esq., M.P., F.R.S.
 Lieut.-General JOHN BRIGGS.
 RICHARD CLARKE, Esq.
 The Rev. W. CURETON, F.R.S.
 Sir J. F. DAVIS, Bart.
 The Hon. MOUNTSTUART ELPHINSTONE.
 Professor D. FORBES.
 Col. GEN. LE GRAND JACOB, C.B.
 The Rev. HENRY MELVILL.

Colonel WILLIAM MILNE,
 WILLIAM H. MORLEY, Esq.
 The Duke of NORTHUMBERLAND.
 The Rev. THEODORE PRESTON, M.A.
 O. DE B. PRIAULX, Esq.
 Lt.-Col. Sir H. C. RAWLINSON, K.C.B.
 The Rev. G. CECIL RENOARD, B.D.
 The Rev. JAMES REYNOLDS, B.A.
 The Rev. T. ROBINSON, D.D.
 Colonel W. H. SYKES, M.P., F.R.S.
 The Ven. ARCHD. TATTAM, D.D.
 Prof. HORACE HAYMAN WILSON.

Treasurer:—BERIAN BOTFIELD, Esq., M.P.

Secretary:—The Rev. JAMES REYNOLDS, B.A.

LIST OF ANNUAL SUBSCRIPTIONS.

For Royal Paper Copies of the Works Published by the Fund.

HER MOST EXCELLENT MAJESTY THE QUEEN.
 His Royal Highness the Prince Consort.
 His Majesty the King of the Netherlands.
 His Majesty the King of the Belgians.
 His Imperial and Royal Highness the Grand Duke of Tuscany.
 His Grace the Duke of Buccleuch and Queensbury.
 His Grace the Duke of Northumberland.
 The Most Honourable the Marquess of Cholmondeley.
 The Right Honourable the Earl of Ripon.
 The Right Rev. the Lord Bishop of Winchester.
 The Honourable Mountstuart Elphinstone.
 The Secretary of State for India in Council.
 The Wesleyan Missionary Society.
 The Asiatic Society of Bengal.
 The Bombay Branch of the Royal Asiatic Society.
 The Library of Exeter College, *Oxford*.
 The Imperial Library, *Vienna*.
 The Imperial Academy of Sciences of St. Petersburg.
 Beriah Botfield, Esq., F.R.S.
 Charles Purton Cooper, Esq., F.R.S.
 E. G. Culling Eardley, Esq.
 Lieut.-General Edward Frederick, C.B.
 Hudson Gurney, Esq., F.R.S.

For Demy Paper Copies.

The Right Honourable Lord Ashburton.
 Count Miniscalchi Erizzo.
 J. D. Macbride, D.C.L.
 Osmond de Beauvoir Priaux, Esq.
 Maha Raja Apurva Krishna.
 Edward E. Salisbury, Esq.
 John Walker, Esq.
 The Imperial University, *Dorpat*.
 The London Institution.

* * It is requested that those Individuals or Institutions who are willing to subscribe to the Oriental Translation Fund will send their names addressed to "The Secretary of the Oriental Translation Committee, Royal Asiatic Society's House, No. 5, New Burlington Street, London;" and inform him where their subscriptions will be paid. The Amount of Subscription is Ten Guineas Annually, for large paper copies; and Five Guineas for small paper copies.

JOURNAL

OF

THE ROYAL ASIATIC SOCIETY.

ART. I.—*On the Uriya and Kondh Population of Orissa. By*
LIEUT. J. P. FRYE, *in charge of the Agency in the Hill*
Tracts of Orissa.

[Read 20th March, 1858.]

THE term maliah, or malo, rendered "hill tracts," is a corruption of the Sanscrit word "mala," signifying "a garland;" and is applied to the continuous jungles which cover the surface of the Eastern Ghauts. The words "rajio," or "deso," signifying "a principality," or "country," are employed to designate the zemindaries which surround them; while the open country, stretching from their bases to the coast of Orissa, is called "tolo deso," or "low country." The above terms belong to the Uriya language. The Kondh calls his own country "Kui Dina," or "Kui Pruti;" and that inhabited by Uriyas, he designates "Sasi Dina."

The malo is distinguished by various names, according as its connection with the zemindaries, situated below the Ghauts, distributes it into separate jurisdictions. Thus, within the limits of the Sircar of Ganjam, are, amongst others, the Goomsur, Souradah, Koradah, and Kimidi Malo.

The malo, or hill tract, subordinate to the zemindary of Kimidi, or Kimmindi, comprises, according to native calculation, a tract of 160 kos in length. Subsequent to its subjugation to the House of Kimidi, it became divided into two portions, of which the southern was distinguished as the Porolah or Purlah Kimidi Malo. At present, the northern portion is subdivided into two jurisdictions; and the whole malo is known by the names of "Porolah" or "Parlah" the

2 THE URIYA AND KONDH POPULATION OF ORISSA.

godah, or residence of the ruling family, having been established at a village of that name.

The Parlah Kimidi Malo is peopled, except in a few villages on its northern boundary, by the Saora race, who speak a different language, and are, if possible, more wild in bearing than the Kondh. Of this race little is known, but the courts of the Ganjam Agency bear evidence to their lawless violence. Human sacrifice is not practised, as they profess themselves unable to perform the rite ; but flesh is purchased from the Kondhs, and buried in their fields. The length of this malo is estimated at about 40 kos.

The Bodo Kimidi Malo is of small extent, being about 20 kos in length. It lies intermediate, but somewhat to the eastward of those of Parlah and Sano Kimidi. Its chief inhabitants are the Saora race. One portion of this tract is peopled by Kondhs, who maintain human sacrifice.

The Sano Kimidi Malo, the most northern and largest in extent of these tracts, is, on native computation, about 100 kos from north to south, and 40 from east to west. Its boundaries are as follow :

On the north-east, the malos of Goomsur and Boad, subject to the authorities in Ganjam and Cuttack ; on the north, a tract of debatable land called the Maji Deso ; on the north-west and west, the Kalahandi Deso, under the jurisdiction of Nagpur ; on the south-west and south, the extensive Raj of Jaypur, under the surveillance of the Agency in Vizagapatnam ; on the south-east and east, the petty zemindary of Kattingiah, and the Souradah Malo, under the control of the Agencies in Ganjam and the hill tracts of Orissa.

The above tract is hemmed in on all sides by the Kondh and Gond races ; and if the malos of Boad and Goomsur, where the rite of human sacrifice has been suppressed, that of Souradah, in which female infanticide exists, and Kattingiah, free from either evil, be excepted, it is surrounded by the votaries of human sacrifice, as yet almost unchecked in the observance of the rite, and virtually independent of European control. There are remote glens, the inhabitants of which have never left their narrow bounds, or carried their knowledge of mankind further than occasional intercourse with their brethren of the next valley. Placed beyond the pale of communication with the plains, the tenants of these hills are necessarily buried in ignorance, superstition, and prejudice.

The general features of the malo are successive ranges of hills, of various elevation, clothed with timber of small growth, brushwood, and high coarse grasses. The intervening valleys are, in the central or more remote localities, frequently uninhabited, and present to the

eye unbroken sheets of wild luxuriance. In other instances they have been selected as sites for villages ; and the very bed of the valley or ravine, rich through the attrition of ages, is distributed into rice fields with great labour, and a few hill-sides are cleared for the culture of dhál, and other legumina, which, rather than rice, form the staple of food.

The ranges, generally speaking, run nearly in a line parallel with the eastern coast, hence the increase of elevation is westward. Ascending from Goomsur by the Kúrmíngia Ghat, which, in length and steepness of acclivity, exceeds anything yet traversed in this malo, no considerable rise is perceptible, until, by passing to the westward, through the divisions of Ballegúdah and Barkúmá, the frontier of Kalahandi is attained ; if, entering at Solaveska, a course be pursued to the south parallel with the Kondh tracts of Madanpur, a chain is traversed which composes the exterior and most elevated range in the malo. This tract is but little known. On leaving Solaveska in a south-easterly route, a long and somewhat steep declivity is encountered ; and the fall is continued until the valley of Pússangah is entered. From this intermediate range to the divisions of Sarangaddah, Budagodah, &c., on the inner or eastern verge of the malo, a gradual decline is perceptible. Thus, in the northern district of Mahasinghí, three distinct ranges may be traced. One to the eastward of these is entered in the southern district of Suvarnagiri, and the declivity of a steep ghaut is in a south-westerly direction. Again, still further to the east, a sharp ascent leads from Surampur to Gaddapur, from the crest of which the descent to the low country is gradual and continuous. Strong inequalities of surface and rocky beds of torrents, trying to laden cattle, frequently occur ; but the passes from range to range do not present any very formidable obstacle to progress, while many of the footpaths which connect village with village, by passing through beds of successive valleys, lessen the toil of travel. Roads there are none, and the axe is often in request to open the forest for the passage of baggage cattle.

In the central or western portions of the malo, ravines intersect the hills, but in the intermediate range, vallies and stretches of level country occur. The eye is relieved, after resting for hours on unbroken forests, or vainly seeking signs of animal life in deep wooded glens, by a sudden transition into an open space studded with villages. But disappointment succeeds the momentary pleasure, when it is perceived that but little advantage is taken of such favoured sites ; save a strip of rice cultivation, the valley is almost untouched by the plough, and generally covered with coarse grass. The villages, how-

ever, appear larger and more substantial than those located in ravines. The district of Masaka, or Mahasinghi, forms the wildest and poorest part of the country. Those portions under the real control of the Uriya chieftain wear a more favourable appearance, though the divisions on the eastern and western boundary are wild in the extreme. In the district of Gaddapur the country is open, and everything approximates in feature to the adjoining zemindaries.

The Baguadi, a feeder of the Mahanadi, intersects the division of Ballegudah on the northern frontier of the malo, and, flowing in a north-westerly course, waters the Maji Deso valley, between the eastern and western faces of the Patna and Boad Malos, and debouches into the great stream near Sohnpur. At the ford of Ballegudah, the banks are high and steep, and the channel is upwards of 300 feet in width. The Rasakoila, which flows into the sea at Ganjam, is met with near Kattingiah, below the south-eastern verge of the malo, as a clear mountain streamlet. Narrow and rocky channels of torrents, in which the flow is generally eastward, are constantly encountered.

Springs are abundant; the sound of running water is heard in every valley, and the fields are capable of cultivation when all is parched in the low country. But as one average crop meets the wants of the grower, they are suffered to lie fallow until the ensuing season. Tanks or wells are not met with in the malo.

The soil generally is shallow, stones and gravel being scattered over the surface. The alluvial deposit of the valley is very rich; and if it be narrow, or of limited extent, its entire bed is distributed into fields. In clearing the higher ground, timber is destroyed by making an incision, encircling the trunk, a foot or so from the root, and of sufficient depth to admit of the escape of the sap. Fire is also applied to clear the surface of grasses and brushwood. The soil is lightly turned with a shallow plough; and, amidst stones and clods of earth, small grains and hardy leguminous plants take root, and yield a scanty increase.

The malo is divisible into six districts, of which two only, Masaka or Mahasinghi, to the north, and Suvarnagiri to the south, are above the Ghats; Gaddapur, on their verge, stretches towards the plains in a south-easterly direction; while below them are those of Panigundah, Berekote, and Chandragiri.

The larger tracts, designated districts and divisions, are styled by the Uriyas "Deso," and by the Kondhs "Dina;" while the subdivisions are called by the former, "Mutah," and by the latter "Khand," signifying a piece or fragment. The Kondh calls his country after the name of his Uriya chieftain. Thus, a Kondh of Barkumah, or of

Budagudah, would call their respective countries "Rogo Dina," or "Guni Dina," as being under the sway of Rogo Patro, or Guni Patro; in speaking of themselves collectively, they style themselves "Rogo Millaka," or "Guni Millaka," i.e., children of Rogo or Guni Patro; and, in distinguishing a man of one division from one of another, they add the word "anju," "person," to the name of the place.

Of the above districts, Chandragiri alone can be said to be free from connexion and sympathy with human sacrifice. It is under the immediate control of the "Borjiri Tilo," or, as it is commonly called, "Borisolo" family; and an annual assessment is paid into the treasury at Ganjam. It is inhabited almost exclusively by the Suorah race. In the division of Kurtelu, under Mahasinghi, human blood is not shed; but the efficacy of such an offering is fully admitted. The Kondhs of that division state that they formerly sacrificed human victims, but as their forefathers failed to teach them how to do so acceptably, the deity forbade their further immolation. They, however, offer a buffalo annually at the usual period of the Meriah sacrifice, with the ceremonial which obtained when a more precious victim was provided. They affirm that the fertility of their fields, and security from general ill, depends on the due performance of the rite. The priest slays the victim, and morsels of the flesh are carried off to the neighbouring villages and eaten. The non-observance of the Meriah sacrifice in this division is of little importance, as general sympathy in favour of the rite manifests itself in the provision of victims to the sacrificing division by which it is bordered. With the above exceptions, human sacrifice is everywhere regarded as essential to welfare.

In each division is a village, generally occupying an open site, and solely or mainly inhabited by an Uriya population. It is styled the "godah," or fort, and often bears the name of the division of which it forms, as it were, the capital. The head of the community is called, by his Uriya followers, "Patro," and, by his Kondh subjects, "Patrenju," or, more commonly, "Rajenju," equivalent to Raja. The Patros, especially those of Mahasinghi, also call each other Raja, when speaking of themselves with reference to the Kondhs. The Patro is the ruler of his own division, and resists the slightest encroachment of a neighbour. He is surrounded by a petty Court, so to speak, consisting of members of his own family, a few officials with distinct titles, armed retainers and dependents, comprising a few artizans, and emigrants who have flocked round the chief in times of local scarcity.

Where the village is not exclusively inhabited by the Uriya population, the main streets form the residence of the Patro and his followers. At Sarangaddah, the Uriya quarter is situated between a

Kondh village to the west, and a Gond settlement to the east. In other places a Kondh village aligns with it.

A few families of the Gond race have emigrated from Kalahandi and Bastar at various times. Some have settled at Sarangaddah, while others have passed on into the Goomsur Malo, and penetrated as far to the eastward as Udyagiri, near the head of the Kúrminghia Pass, where a colony has established itself. They are also met with, as a few families, at Chaohingudah, and Kiritingiah, of Goomsur, lying between the above points. These emigrations still continue in times of scarcity, but their numbers are very trifling. It is in the countries bordering this malo to the west that they are known as a people. The Patros of the frontier divisions of Lonkagodah and Bellagodah are of this race, as is also the Chief of Mohangiri, under Kalahandi, not to mention in this place other men of influence. The Gonds settled at Sarangaddah, receive land of the Patro in return for general service. They intermarry with the families of their race in Goomsur : they reside at the godah. With regard to their customs, their mythology differs from that of the Uriyas or Kondhs. They sacrifice animals, drink ardent spirits, eat flesh, but eschew that of the cow : they will not partake of food with any other class. Their feelings on the question of human sacrifice are not, as yet, accurately ascertained ; but it is asserted that they do not perform the rite. The titles amongst them are "Dalbehra" and "Magi." They esteem themselves of great purity of race, so that in former days they considered the approach of a Brahman to their dwellings as conveying an impurity to the spot ; they are now, however, somewhat less rigid on this ground. The Uriyas of the hills, while they regard the Kondhs as a distinct and inferior race, assign to the Gonds a common origin with themselves. The tradition received at Sarangaddah is as follows :—

A certain raja, named Sobhajoi Singh, being unmarried, and desirous of issue, called to his bed four parties in succession. Those selected were the daughters of a washerman, a potter, a distiller of spirits, and a Brahman ; and the respective issue was a Doholo or Dolo, a Kohouro, a Gond, and the Nolo Benso Patro—the progenitors of the four classes now met with in the malo.

The Kondhs, as a race, are the owners and cultivators of the soil ; and they inhabit villages scattered, or closely grouped, according to the opportunities which present themselves for tillage.

The site of a village is generally selected with reference to the valley, on which life mainly depends, and is accordingly to be seen crowning a slope which rises gently from the irrigated land. When a community is torn by feuds, such a site is abandoned, and a strong

position on a hill preferred, in which case the settlement is surrounded by a rude stone wall; otherwise, villages are wholly unprotected. The streets generally run from east to west; little regularity is, however, observed in building. The houses are very small and low, but firmly constructed of planks, inserted horizontally into grooves cut in the corner posts; the whole surface is plastered with mud; they are thatched with the large strong grass which abounds in the jungle. They generally contain three rooms: in the centre one the family dwells; one is used for the purpose of cooking; and the other as a store room. There is but one door, which, during the cold season, is firmly closed to exclude the outer air; while the family sleep round the wood fire, which is lighted on the floor. In each village are houses set apart for the youth of either sex, in one or other of which they pass the night with as many of their own sex as the village may contain. The symbols of human sacrifice, consisting of long bamboo poles, and posts rudely carved, are to be seen in the main streets of every village; while outside, in an open place, similar posts are observable, marking the site of a small mound of stones, the place of interment of the mangled remains of the victims. In the district of Suvarnagiri, a huge log, one end of which is fashioned into a form resembling an elephant's head, is placed at right angles and at an equipoise, upon an upright post, on which it revolves when propelled. It appears to be in lieu of the carved posts of the Mahasinghi district. The usual place of concourse is the street, or the open spaces at either end of the village, where cattle also are tethered during the night.

In the district of Mahasinghi, which is more isolated, wild, and thinly populated than those to the south, the villages are small, rarely exceeding one or two streets, and often comprising about as many houses. In Suvarnagiri they are large and substantial, some containing from 200 to 300 families. But the population everywhere is very thin.

The Uriyas generally add the affix of "gám" to the different names of villages: as "Diggo-gám," or "Sindragám." Amongst the Kondhas, the village, or otherwise the main street, often bears the name of the founder, to which is affixed the word "millaka," or "children," succeeding generations being esteemed his offspring. Thus a village is styled Diggo Millaka, as founded by Diggo. In like manner, each street bears the name of the person who founded, or was originally connected with it; to which are added the names of "khanda," or "para," a side, or quarter: as, "Birisa Khanda," and "Dáta Para."

In personal appearance, the Uriyas of this malo are far inferior to their brethren in the plains, and wear the appearance of a gradual degeneracy and assimilation to a lower stage of civilization. This is more perceptible in the north than in the south. In Mahasinghí, the Patros are scarcely distinguishable from the Kondhs; and the name of "Uriya Kondh," contemptuously applied to them by the people of the plains, aptly describes their condition. Amongst the Kondhs, specimens are abundant of agile manhood. In the young man, thew and sinew, breadth of chest, and pleasing features are not wanting. In some places, especially in the division of Pússangah, the stature is commanding. Many bear a striking resemblance, in the facial angle, the retiring forehead, high cheek-bones, and aquiline nose, to the American Indian. The females are low of stature, coarse in person, and repulsive in feature. An appearance of unchasteness pervades all classes, and their habits are said to be filthy in the extreme.

The Uriyas, when compared with Kondhs as a class, may be esteemed the less degraded of a deeply debased people—regarding themselves, and considered by the latter, of a higher order; and as the rulers of the land, they are prevented by position from losing every trace of difference in race and creed. They are almost universally illiterate. In the district of Mahasinghí no one can read or write. In the south, from intercourse with the plains, they stand out more distinctly as members of the Uriya family; but, with few exceptions, they are swayed by sympathy with, or fear of, the Kondhs, whom, at the same time, they profess to regard as a very inferior race.

The Kondh is quite uncivilized; ignorance and superstition are universal. The striking of a clock produced the most lively sensations of alarm; the telling of the hours being esteemed a supernatural summons for the surrender of the Meriahs, whose numbers were thus detailed. The deity in whose favour human sacrifice is offered, was always supposed to retire on the approach of the agency. In some places, the simple curiosity of the savage was manifested. At one encampment a curious scene occurred: the camp was fixed in a small valley; a gentle slope on the one side, and an abrupt rocky hill on the other, were respectively crowned by a village. Groups of either sex were observed seated afar off, and looking on with fear and astonishment. By degrees the men approached the camp, and curiously examined the tents; gradually they gained confidence, and sat at the doors, when the officers of the escort excited their surprise by exhibiting the mirror and the burning-glass. The wonders now seen for the first time were recounted in the village; and bands of women, apparently unable to resist the opportunity of seeing and comparing

their charms, took confidence, and, under the escort of one or two aged men, made successive rushes into the camp, sought the tents, and eagerly gazed into the mirror. Peals of merriment succeeded the first emotions of surprise, and vanity, excited perhaps for the first time, led to comparisons of the beauty of each other's tattooed and disfigured features. The females soon retired, but the men often spent hours in the adornment of their persons.

The Uriya has no right in the soil: he is essentially a trader, and supplies the wants of the Kondhs by importing commodities into the hills from the marts of the low country, or by purchasing them from the merchants who periodically visit the godah. He carries on a petty traffic from village to village, receiving in exchange grain, or, more rarely, land. The cultivation around the godah does not of necessity belong to the Uriya population. The Patro and his dependents purchase according to their means, and till the ground in person. In the division of Púsangah, the former owns four, and his followers, on an average, one or two fields each of the irrigation adjoining the godah; and, collectively, some ten or twelve fields of that attached to Kondh villages. The amount of land in possession of the Uriyas varies according to circumstances, the largest proportion being held, in the Mahasinghí district, by Guni Patro, the eldest branch of the divided family ruling in various parts of the district. But in no case is it sufficient for support, irrespective of trade. Previous to the intervention of Government, the sale of children for sacrifice was a lucrative source of income, land being frequently received in payment.

The Kondh is a husbandman and a hunter. He knows no trade, and has no extraneous source of subsistence. His means are the fruits of the earth, and the products of the plains.

The right over the land is vested unreservedly in the holder, children having no power of a veto upon its sale, as in the case of ancestral property in the plains. On marriage, a son quits the paternal roof and becomes a householder, receiving a share of the land at the hands of his father. In the case of many sons, the division is equally made, there being no recognition of the claim of primogeniture.

In seasons of scarcity land is sold, and the family maintain themselves by the culture of dhál and pulses on the hill-sides. The buyer pays the value of his purchase in grain. When Kondhs are the contracting parties, the relatives on either side are present as witnesses. The seller places some soil of the field in the hand of the purchaser, as a token of his right of possession: the seller then declares that the transfer has been effected for value received, and calls down a curse

on himself should he again claim the land : this compact is generally preserved inviolate. Redemption is of rare occurrence.

The Kondh divides the year into three seasons—namely, “Penni,” the cold ; “Harra,” the hot ; and “Piju dina,” the rainy season. He further marks the seasons of agriculture, as follows : “Irpi vela,” the time when the flowers of the Mahwa tree fall, or February and March of our year, when the ploughing commences ; “Maha vela,” the period of ripe mangoes, or May and June, when the rice crop is sown ; and “Bikka vela,” the season of harvest, or the months of October and November. The rains commence in the end of May, or perhaps somewhat earlier. At the commencement of the hot season, the young persons of both sexes go out into the jungles in parties to gather the flowers of the Mahwa for distillation. This is described as a season of great licence. Indeed, little care appears to be bestowed upon the young ; though infidelity in the married woman is visited by a fine levied on her paramour, more from motives of policy, it may be conceived, than from a regard to propriety. During the same season the main occupation is the chase. From the commencement of the rains to the harvest, the Kondh is employed in agriculture : the intervening period is one of inaction, excepting during the orgies attendant upon the rite of human sacrifice, to which his attention is directed with a view to secure an abundant crop, and immunity from ill during the ensuing seasons. He occasionally visits the fairs in the low countries during this period.

The produce of the valley—an annual crop of coarse rice—is trodden out by the foot of the reaper, and generally secreted in hiding-places in the hills ; a small quantity for immediate consumption being stored in large baskets, grouped on a platform at the head of the village, or placed within the small enclosures in rear of the houses. On higher ground, various small grains, common to the low country, are cultivated, and, when reaped, exposed on high platforms until February or March, when the seeds are threshed or trodden out, and stored in the houses for present use. The hill-sides produce dhál, and other legumina. Mustard and oil seeds are sown in November, and gathered in February. The ginger plant is abundant, and turmeric is partially cultivated ; the roots are dug up in January and February. In the enclosures adjoining a village, yams, beans, gourds, pumpkins, sweet potatoes, brinjalls, plantains, tobacco, and the castor-oil tree are grown in small quantities. The mango and jack-fruit trees attain to a large size. A species of citron is planted in villages. A variety of palm, called in the Uriya “Solopo,” and in the Kondh tongue “Sarta,”

which furnishes an intoxicating beverage, is carefully reared. The "Moholo," or Irpi, is a forest tree. The silk-cotton tree is abundant and productive, but its value as an article of export is unknown. The bamboo is rarely seen in the northern, though common in other parts of the malo. The plantain is met with in localities which seem to indicate its being indigenous. The deep forest glen presents no traces of its cultivation; and the plant seems as natural a tenant of the waste as the fern or lily which grows in its neighbourhood. The wild plant does not possess the same girth of stem as that under cultivation, not being more than an inch in diameter. The orange and lime are said to be indigenous in the western border of the malo.

The weekly marts held at the Kasbah of Souradah, and the village of Ballaguntah, in the Goomsur zemindary, are occasionally attended by the people of this malo. The Kondhs of Sarangaddah and Balle-gudah frequent the latter in person; but for the most part the petty traffic is in the hands of the Uriyas and Panwaha, who repair thither three or four times in the year, chiefly during the cold season. Until lately, the people of Suvarnagiri used to frequent a fair at Simpur of Gaddapur, but owing to ill-blood between those districts, and the consequent insecurity of the road, traders have ceased to repair thither. The Panwaha of the western frontier divisions, Lonkagodah, Balle-gudah, Bimarmallika, &c., frequent a fair in Patna of Kalahandi. In the two first-named places, Uriyas are the chief inhabitants; and the villages are large, and comparatively wealthy, the Kondhs being few and poor.

The exports are turmeric, oil-seeds, yams, and ginger. Some parties proceed direct to Ballaguntah, which mart is more frequented than that of Souradah. Others sell their produce at Porala, a village near Russellkondah, where merchants await their arrival, and then pass on to Ballaguntah to make their purchases.

The imports are—cattle for the plough, metal cooking utensils, ornaments, coarse cotton cloths, cotton, beads, iron bars, salt, salt fish, and occasionally silks and fine cloths for the use of the Patro. No dues are levied upon this traffic.

The value of the produce carried down to the marts by an individual is exceedingly small. It is enclosed in light baskets, formed of leaves sewed together, one or two of which form a burthen; the average value of one such load of turmeric being about 12 annas, and, of other commodities, 1 rupee. The total annual exports of one individual may amount to 4 or 5 rupees.

The average price of turmeric may be 20, ginger 12 vis, mustard and sesame oil-seeds 10 and 12 ghunis per rupee; but it naturally

fluctuates. Bullocks are purchased at from 2 to 4, and buffaloes from 3 to 4 rupees a pair; they are old or worn-out beasts. Cotton cloth is procured at 8 anas per piece, and beads at from 30 to 40 strings per rupee. Three vis of turmeric are exchanged for two of salt, and for salt fish at par.

The yokes of ploughing cattle are exchanged in the Kondh villages for rice, the rates of which are nearly uniform throughout the malo: the former averages 120, and the latter 60 seers per rupee. The usual exchange for a yoke of cattle is 600 seers of paddy, equivalent to 5 rupees. This produce is either consumed or, of late, reserved for sale, the periodical visit of the Agency having converted it into an article of traffic.

A small and fluctuating trade is open between this malo and the zemindari of Daspallah. Merchants by caste, or oil sellers, cross the malo of Boad, and proceed by Bondagadah into the northern divisions, in parties of three or four men, with from twelve to fourteen bullocks laden with cloth, salt, and salt fish. To these, until lately, they added brass and copper vessels; but owing to a decrease in the demand for turmeric, which is procurable in large quantities in the more accessible malos of Boad and Goomsur, they have ceased to do so, or to visit the malo so regularly as before.

On arrival, the mart is opened in the verandah of the Patro's house, when the Uriyas transfer to them, at an average rate of 3 for 1 of salt, or from 12 to 16 vis for a piece of cloth valued at 8 anas, the turmeric which they have procured in the villages at an average rate of 6 vis for 1 of salt.

The above remarks primarily refer to the division of Pússangah, which is comparatively open, and, judging from a rough census of population and produce which it was endeavoured to compile, more productive than most other parts of the malo. Here, then, the annual amount of turmeric sold to the merchant was estimated at 20 rupees, while that carried down to the markets was stated at the value of 10 rupees.

The average of traffic will naturally depend upon the proximity or remoteness of the division from the marts of the low country, the absence or prevalence of fend, and the facility or difficulty of intercourse. In Sarangaddah, bordered by the malos of Boad and Goomsur, whence a direct road leads through the comparatively wealthy divisions of the last-named tract to the mart of Ballaguntah, an appearance of substance is perceptible. The sugar-cane, unknown in other parts, is cultivated, and regular intercourse maintained with the plains; but in the interior, or western frontier of the malo, there

is little inducement for the growth of produce beyond what is necessary to support life. Owing to distance, fear of surrounding foes, and absence of roads, communication is closed ; and the Kondh depends solely on the casual visits of the Uriya for the supply of his necessities.

The wants of a race so rude and isolated are few, but even these are not adequately supplied, marked poverty being generally visible. The primary cause of such a condition lies in the imagined necessity for human sacrifice—a rite which deluges the land with social evils. Feuds, and the remoteness of the marts, also contribute to aggravate the evil.

The cattle are poor in the extreme, being the wretched worn-out beasts purchased at the fairs. Milch cows are rarely met with ; sheep and goats are plentiful—the former are small, but the flesh is of a delicate flavour ; the latter are much prized in the low country. Swine, scarcely to be distinguished from the wild species, and a few fowls, complete the list of domestic animals. The dog and the cat frequent the village, and the surrounding jungle abounds in beasts of prey and game.

Cloth being an article of very limited import, the use of dress is confined amongst all classes to the narrowest bounds admitted by decency. The Uriya is contented with one coarse piece fastened round his loins, the head being generally uncovered. The Patro himself, especially in Mahasinghi, is distinguished by a species of robe of office, consisting of a red blanket, ornamented with a variously coloured fringe. The Uriya frequently wears his very limited covering according to Kondh usage. The Kondh is generally more scantily clothed than the Uriya, and his mode of dress more repulsive to decency, the cloth being old and foul. Should he, however, wear one of the strong pieces woven in the country, which consists of a long narrow strip, with either end composed of bright colours and fringed, he assumes a somewhat better appearance. The ends, however, are suffered to hang down behind, so as to resemble a tail, the wearer thus claiming an affinity with the lower creation, which, in his case, is well nigh superfluous. But the head-dress is the characteristic feature in the Kondh costume : the hair of the head, which is worn very long, is drawn forward, and rolled up until it resembles a short horn protruding from between the eyes. Around this it is his delight to wrap a piece of red cloth, and insert the feathers of a favourite bird, as also his pipe, comb, &c. The adornment of this horn is apparently of the first importance, and the naked savage may be seen intoxicated with vanity on its due decoration. On the western frontier, cloth was

unknown, and strips of paper sufficed to procure fowls and grain. The ears of either sex are weighed down with a profusion of brass rings; the nostrils are also pierced; heavy brass armlets are worn; and necklaces of brass or glass beads. In the south, the horn of hair is worn on the right side of the head, and broad leaden rings are inserted in each nostril. The use of coarse brass ornaments is more prevalent than in the north. The clothing of the women is nearly as limited as that of the males; the bosom is invariably exposed, and a single cloth is worn round the loins, which does not reach below the middle of the thigh. Advanced pregnancy does not secure a greater regard to decency.

The Uriya, as a trader, is well acquainted with the value of money; and being very poor, is proportionably grasping. The Kondh generally prefers barter, the most highly esteemed equivalent being a strip of red cloth. When money is required, the demand generally exhibits an ignorance of its relative value. In the more remote parts it is refused; or a copper coin, if received, is regarded as an ornament, and suspended to the necks of the children.

Independently of the ultimate advantages resulting from the abolition of human sacrifice, it is worthy of remark, that the annual visits of the Agency confer a direct benefit upon this poverty-stricken land, by giving an impulse to trade, and creating a circulation of money, which, if duly seconded by further beneficial measures, will manifest itself, on the exchange of the current medium for the necessaries of life, in the permanent amelioration of the condition of the people.

Without reference to the gratuities conferred upon those with whom the Agent holds direct communication on the subject of his mission, the presence of a large camp necessarily causes a steady demand for rice, otherwise unmarketable, and other commodities which are procurable without difficulty in every division. Once only, on the frontier of Kalahandi, in a sub-division rarely visited by Uriyas, it was found necessary to procure a supply from Mohangiri, within the Nagpur territory. The Uriyas were the chief purveyors, the grain being brought from the godah, where a rate, ensuring a considerable profit to the seller, was established. The Kondhs also frequented the camp, offering for sale gourds, eggs, fowls, sheep, goats, pea-fowl, jungle-swine, and grain.

The food of the Kondh consists principally of a kind of strong broth made from dhál; also rice, boiled the previous night and turned into a sort of sour gruel. They eat all animals killed in the chase, but are sparing in the use of domestic animals. Should any be slain by a beast of prey, or offered in sacrifice, the flesh is generally eaten.

The Kondh is prone to intoxication. During the Meriah sacrifice, in particular, they are so frenzied with deep indulgence as to be dangerous of approach. But, generally speaking, the vice is less prevalent than in the malos of Goomsur and Boad, from the absence of opportunity rather than want of inclination. The people of the plains have not begun to derive a nefarious profit by pandering to this depraved taste. The "Sundi," or spirit-seller, has not established his still; and the people are dependent on their own resources for distillation. No opportunity of excess is, however, permitted to pass by.

Ardent spirits are procured from rice and other grains, as also from the flower of the Mahwa tree, by a simple process of distillation. The juice of the palm, called "sarta," is drawn and drunk in a state of fermentation. The use of strong tobacco is universal: it is cut up, and inclosed in a pipe formed of a broad leaf, which is generally inserted into the head-dress, or the cloth. Several are thus carried, lit as occasion requires, and then replaced for further use. As the Kondh never appears at ease except when seated, so his thoughts appear to stagnate unless brought out under the influence of tobacco. Seated, or rather squatted in a circle, and smoking intensely, the elders discuss all matters of interest.

The implements of agriculture are—a rude plough, a harrow with a double row of wooden teeth, a small narrow felling axe, a sickle, and a wood-knife. With the axe alone timber is fashioned into planks, and laboriously planed, to form the walls of houses.

A battle-axe, the blade of which is divided into two points resembling the rays of a star-fish, and a rude bow and arrow, appear to be the only weapons of war. In the north these are rarely seen: but the constant companion of the Kondh is a long staff. This, however, he lays aside when about to pay his respects to the Agent, and presents himself unarmed. No display attends the visit of the Mahasinghi or Suvarnagiri Kondh; but in Gaddapur, and throughout the Souradah Malo, he approaches with music and dancing, armed, and heated with ardent spirits. The axe is brandished with shouts and cries, and the object of the interview marred by noisy tumult. The war-dress of the Kondh consists of a turban, adorned with a crest of feathers, and a strong cloth wound tightly round the body. In Mahasinghi, the broad axe of Boad is generally carried by the Patro and his retainers. In the south, the matchlock and shield are their usual weapons.

The instruments of music amongst the Uriyas are similar to those in use in the plains. Various kinds of drums, and the trumpet furnished by the Patro, are employed by the Kondhs during the Meriah

sacrifice. The "doka," a primitive species of lute, having two strings of wire, and a sounding-board composed of gourds, is peculiar to the hills. The shepherd's pipe is also commonly heard, joined with shrill song, in the pasturing grounds.

The dance is a principal amusement, though it is difficult to conceive anything more monotonous. It consists of a kind of shuffling gait on a straight line. The feet are scarcely raised from the ground, on which the eyes are steadily fixed; the arms are held close to the body, the elbows at right angles with the clenched fist. The whole body seems engaged in progression. When the end of the line is attained, the dancer raises his head, and assuming a triumphant air, wheels round, and recommences the laboured step at the point from whence he started. A performer guides the measure on a lute, and the spectators keep time by clapping the hands; at times, two dancers advance abreast, and wheel outwards to resume the measure. The battle-axe, so adroitly brandished in the dances of Boad and Goomsur, is not used in this *malo*, except perhaps in Gaddapur.

The Patro and his followers speak the Uriya language. Their pronunciation, however, is so different from that of the plains as to be scarcely intelligible. The use of Sanscrit words, with which the tongue of the educated is overladen, is rare, and it is, consequently, more simply an Indian language. The Kondh tongue is purely so, as it does not supply its deficiencies from the Sanscrit. It is similar in construction with the Telugu, Tamil, Uriya, and other cognate languages; exhibiting their analogous peculiarities of idiom with singular fulness. In these, a grammatical construction—the immediate opposite of the Sanscrit—is discernible in various degrees. In the Kondh language, this construction stands out distinctly—pure and unadulterated. It may therefore be regarded as a specimen of Indian tongues in their integrity, before they yielded to the necessity of an artificial medium, to give expression to the abstruse dogmas of a mystical creed. The language of the land, or the Indian tongue, is still found in the speech of the illiterate, in the names of physical objects, and the ordinary bodily or mental emotions of mankind, while the Hindú languages are debtors to the Sanscrit for copiousness and embellishment, in the same ratio as modern English expresses the ideas of civilization by enlisting the dead languages of the West into its service. The Kondh tongue, I conceive, stands in an analogous position with the primitive Saxon; and the same destiny attends it, when civilization and revealed truth succeed to the simplicity and ignorance of savage life. The medium through which new ideas should be conveyed is an interesting question.

The language is spoken with purity in this malo, remoteness preventing the adoption of words from the plains ; the Uriya tongue is also spoken pure in and around this tract : the Kondh bears no affinity to it ; while many words are identical with those expressive of the same idea in Telugu and Tamil—tongues current amongst nations whose centre of dominion is considerably to the south of the malo. The numerals are almost the same with those of the former, while the demonstrative pronoun closely resembles that of the latter language. An investigation of the Gond language during the tour established its identity of idiom with the Kondh tongue, though distinct as regards words. The Saora speech is not sufficiently known to authorize an opinion, though analogy of idiom may be reasonably expected. On the western frontier, the Kondh and Gond languages are so much mingled, as to render communication with the people very difficult.

Rapidity of utterance and a natural eloquence is often displayed ; one idea is dwelt upon, and exemplified to its utmost limit. Were it necessary to allude to a state of poverty, everything connected with Kondh life—crops, farming implements, household property, progeny, relatives, or whatsoever else there may be, would be enumerated with great volubility. During a harangue, the voice is peculiarly modulated. The heads of two subdivisions were, on one occasion, convened to arrange a feud ; the leading Malliko was called upon to open the case. He was seated, and, directing his eyes to the ground, commenced at the ordinary pitch of his voice, which gradually fell to a very low tone. After a time, his voice suddenly resumed its natural pitch ; a new point of the subject was entered upon, the speaker apparently absorbed in the question before him. An uninterrupted flow of rapid utterance lasted for some time, and was met by intense attention in the parties interested. The general bearing only would be caught by any other than a Kondh audience ; but it was clear, on further inquiry, that he had advocated the cause of his party in full, and with much effect.

The poetry, as far as is yet known, is rythmical. In general, one idea is conveyed in a stanza, the main word in the first line being repeated by a synonyme in the last ; an analogy to this construction may be traced in the Hebrew lyrics. Poetry is employed to excite the mental agony of the Meriah on the eve of sacrifice, the officiating priest, the Kondh providing the sacrifice, and the victim, being introduced as speakers. There are also ploughing and marriage songs, with amatory poems, and dirges used at the time of death. The couplets vary from each other in the number of feet ; but a metre is

observed in each member of the stanza. Beyond the harmony, there is nothing attractive in the versification ; and poverty of ideas is in all cases perceptible.

The song is, more strictly speaking, a short and rapid recitative. At the commencement of a couplet, the voice is pitched in a high shrill key, and gradually falls towards its close, being again elevated at the outset of a succeeding distich ; or the whole poem is recited in a low chant. There is a wildness about the notes, when heard at a little distance in the open air, which is very pleasing. The singer is usually accompanied by a player on the lute.

Epidemic diseases are almost unknown. Cholera has never visited the hills, though peculiarly rapid and fatal in its course on those who may approach the plains during its prevalence. Small pox occurs very rarely. The system is hitherto unvitiated by venereal disorder, though intercourse with the plains has introduced this baneful attendant on civilisation into the Kondh tracts of Goomsur. Fever, scrofula, blindness, and various phases of disorders of the eye and spleen, appear to prevail ; and treatment at the hand of the European practitioner is eagerly sought. The knowledge of medicine is limited to the application of a few roots or leaves to wounds and sores.

The operations of the Agency bearing directly and almost exclusively on the suppression of human sacrifice, it might be supposed that its communications would be addressed to the Kondh himself, without any other medium ; but experience shows that he is inaccessible, unless through the introduction of the Uriya chieftain, whom he acknowledges as his ruler by the payment of dues and general obedience.

The godah, or village in which the chieftain and his followers reside, is the acknowledged seat of power within the limits of the division over which the former presides. To it the Kondh subject repairs when summoned by the Patro, either to deliberate in council, or join in war ; and in it is centred all the power which he recognizes as superior to that which he exercises in his own village.

At the godah, therefore, the agent of the paramount power can, with propriety and pursuant with usage, (the maintenance of which appears essential to success,) receive the visit of the Patro. Here also the latter, having testified his feudal relations by presenting a nominal tribute, can, without loss of personal influence, introduce his Kondh subjects. It might appear, that the operations of the Agency would be accelerated by a tour of visits to the Kondh villages, rather than by one limited to the godah ; but such a procedure would be distasteful to both Uriya and Kondh—the one losing his position and influence, and incurring the suspicion and displeasure of his subjects ;

the other, with the connivance of his ruler, marring the proposed object by taking to hiding-places in the hills, where stores of grain render a lengthened stay a matter of no inconvenience.

The godah, then, being selected as the halting-place, the business of the Agency is opened by a visit of ceremony on the part of the Uriya chieftain, attended by his relations and official servants. In the conversation which ensues, the orders of the Government and the duties of the Patro are dilated upon. He is addressed as the ruler his division, and consequently interested in its welfare as an Uriya, and therefore separated by caste and creed from the rite which fills his land with poverty. Having no alternative but obedience, he is directed to introduce his Kondhs, and deliver over the Meriahs, who would be retained or restored after due inquiry, he himself being a party to the deliberation.

It is well known that he is, *de facto*, the mainstay of the prohibited rite, presiding at its consummation, sharing in its supposed efficacy, and directly interested in its continuance as a source of income. But the knowledge of these facts affords the surest ground for his employment in its abolition, as he can only avoid the displeasure of the Government by affording it his zealous aid, while he cannot incur that of the Kondh, who well knows, that were it not for the pressure from without, their custom would continue to be cherished by the chief, who, equally with himself, esteems it essential to the well-being of the land. Further, the necessity of the Uriya to the Kondh, as purveyor of commodities from the plains, and as a medium of communication, renders his position quite secure, while carrying out measures distasteful to both parties. Well aware of this, a surrender of themselves to the Government, as unable to control their people, is employed by the Patros as the last argument, and never fails to ensure the submission of the most reluctant.

The real state of feeling on the part of the chieftain and his followers was evidenced everywhere, though in different degrees, by procrastination, evasion, alleged want of power, and dread of retributive vengeance. These excuses were met by patience, further explanations, and a firm declaration that a great Government could not forego its settled purpose, and that they were called upon to aid from their known ability to do so.

When extreme reluctance or subterfuge was exhibited, the last alternative was offered to the Chief; it was shown him, that it would be an easy matter for the Agent to employ troops to enforce obedience, and the result of so extreme a measure must be loss of position and ruin, as the Kondhs would not tolerate his rule when he proved him-

self unequal to protect them from the direct interference of another power. It was never found to be necessary to carry out this measure, as its proposal invariably elicited the requisite energy.

On inquiry into their creed, and the names of influence acknowledged amongst them, they are found to be summed up in the following formula :—

Manikeswari Devi,
Gonjo Raja,
Athoro Godoh Patro,
Amonaieto Dolo ;

by which is understood—1st, Manikeswari Devi, a peculiar name under which the goddess Parvati, wife of Mahadeva, in her attributes as Durga or Kali, is worshipped as the “Ishta Devi,” or chosen deity of the Gonjo Bonso Rajas and their followers ; 2nd, Gonjo “Raja,” or the ancient house of Orissa¹, represented by the Rajas of the three Kimidis ; 3rd, Athoro Godoh Patro, an officer of rank who held this title, signifying “Governor of Eighteen Forts,” previous to the dispersion of the Gonjo Bonso House, and was invested with control over those erected in the Kimidi Malo by Bhimo Devo, the ancestor of the present Rajas of Sano and Bodo Kimidi, on the occasion of his subjugating the malo, and founding a dynasty at its base ; and 4th, Amonaieto Dolo, or “the free army,” representing the Patros, or feudal barons of the malo, and their followers.

The mention of these names forms a ground-work of inquiry into the previous history and the settlement of the Uriyas in the malo ; and, in pursuing it, recourse must be had to oral tradition, which, with certain admissions, appears to be in the main worthy of credit.

The ancestors of the dispersed branches of the Gonjo Bonso family were the sovereigns of Orissa, the seat of government being Purushottama Khetro, or, as it is more commonly called, Jagannatho Khetro, ordinarily known as Púrí.

The cause of dispersion is thus given by tradition :—A certain Raja, named Pratapa Rudra Devo, had one illegitimate, and eighteen legitimate sons. Hesitating in his selection from amongst these of a successor to the throne of Orissa, he was revolving the matter in his mind, when the god Jagannatho appeared to him in a dream, and told him that the son who should raise the skirt of his robe as he ascended the steps of the temple should succeed him. The Raja accordingly went to the shrine, attended by his sons, when he perceived, on mounting the steps, that his train was raised, and, looking back,

¹ This is a provincialism for “Gaja,” the Uriya Rajas being the “Gajapati,” or “Lords of the Elephant.—See Stirling’s Orissa.—H. H. W.

discovered that his illegitimate son was holding it. Grieved at the supercession of his other children, he yet nominated the lad his heir. His legitimate sons, however, opposed this arrangement, as an exhibition of undue affection, and refused to acknowledge him, unless he passed unscathed the ordeal of standing as a mark for their javelins. The trial was permitted, and he escaped unhurt. His nomination was thereupon acknowledged; and the legitimate sons, accompanied by bodies of personal attendants, dispersed in quest of new possessions, leaving the person so nominated, and who is now represented by the Rajas of Kurda, in undisturbed possession of the throne of their fathers.

One of these brothers, named Bhimo Devo, was the ancestor of the Rajas of Sano and Bodo Kimidi. According to tradition, this prince was walking along in his journey towards a new home, when a crow followed him, flying round his head, and uttering the words "Monima, Monima." A man was drawing toddy from a date-tree, and hearing these words, generally used in the presence of princes, came to the conclusion that one of that rank must be in the neighbourhood. Seeing the prince approach, he recognized him to be such from his demeanour, saluted him, and inquired the cause of his being alone. The prince replied that he was in distress, and in quest of some country over which he might become a ruler. The man carried him on his shoulders until they came to a place where eight chieftains, desirous of a prince to rule over them, were assembled in council. He was gladly received, and became the head of a small tract in the Kimidi Malo, designated the country of the "Eight Mallikas," the site of which is not known. While being carried on the man's shoulder, he made an inward vow to sacrifice him to some chosen goddess, if he obtained his wishes. After receiving the government of the above country, he was anxious to fulfil his vow; but, restrained by the remembrance of the benefits which had been conferred upon him, the subject preyed upon his mind, and affected his health. He reluctantly opened his heart to the eight chiefs over whom he ruled, when the man who had carried him, pitying his distress, voluntarily offered himself for immolation. The question of the goddess on whom the choice should fall next perplexed him, but was deferred. In the meanwhile, he carried his arms into the Raj of Kalahandi, and subdued it. The capital (a village which still bears the same name) was attacked, and the inhabitants forsook it. In it there was a Brahmani, a widow, who had an only daughter, whom she tenderly loved. But the girl had died, and her mother had formed an image from her golden ornaments. When the village was deserted, the

widow fled and abandoned the image. One night, while the Raja was lying outside with his forces, the word "Ma" was heard, and on sending to seek out the person who had uttered the cry, it was traced to the image, which gave an account of her origin; and on being requested to accompany the camp, stipulated that, at every intermediate halt, an animal, and at the final one a human victim, should be offered in her honour. These conditions being subscribed to, the goddess accompanied the camp. On his return from the conquest of Kalahandi, the Raja sacrificed the man who had carried him to his tutelary goddess, and placed her in his original seat of government, the chief village in the country of the Eight Mallikas. The name of the man sacrificed was "Anaka," who requested, at the time of his death, that his name should precede that of the Raja and his successors, and that in every periodical ceremony in honour of deceased ancestors, a plate of food should be especially set apart for him. The request was complied with, and at the present time, this man's name, conjointly with that of the founder of the family, form a part of the title of the Rajas of the Kimidies.

Having reigned for some years over the conquered Raj of Kalahandi, and the petty tract of which he had been first nominated the ruler, the Raja resolved on forming a dynasty in the low country lying beyond the Kimidi Malo. He accordingly bestowed Kalahandi upon a scion of the Mago Bansa family, ruling in Jaypur, as his daughter's dower; and was anxious, under the auspices of his tutelary goddess, to lead his followers to the subjugation of the intervening hill-tracts; but here he was met (according to tradition) by opposition on the part of his chosen deity, the door of whose temple remained firmly closed against every effort, until recourse was had to human sacrifice. An adult was slain, when it turned on its hinges of its own accord, and the propitiated deity accompanied the enterprise.

The Kimidi Malo was at that time under the supreme control of a Raja named Suva Chandra Deva, whose capital was Suvārnagiri, at present the seat of government of Bahadur Patro. Of the history of the above Raja nothing is certainly known; but reference will be made to his probable identity, when treating of the Nolo Bonso Patros. Traces of an ancient temple, &c., are still visible, it is said, on the high peak which bears his name.

The Raja Bhimo Devo, with an army mainly composed of men of Kalahandi and Bustar, with the families who had followed his fortunes from Purushottama Khetro, poured in upon the northern part of the malo, and pursuing his conquests, overthrew the previous dynasty, reduced the Kondhs to submission, and, for the consolida-

tion of his power, distributed the country into a series of feudal dependencies, in each of which he founded a godah, and invested some chosen followers with the powers of government, as Godiahs, on the tenure of military service, payment of an annual tribute, and attendance, when necessary, at the Court of their lord paramount. This arrangement, it is said, arose in part from the request of the vanquished, who needed a medium of communication between themselves and their Uriya conqueror. Certain it is, that at the present day, the Patro urges the obedience of the Kondh, on the ground of his share in the investment of his ancestors with power.

The first godah so founded was Mahasinghi, and others followed as the enterprise was successfully pursued through the length and breadth of the malo. In this manner the country was portioned into eighteen godahs, the masters of which ruled over their Kondh subjects as the vassals of the Raja.

With regard to the forts of the above-named malo, it is sufficient in this place to note that their establishment was ratified, excepting perhaps in the case of Chandragiri, by human sacrifice, in propitiation of the tutelary deity which accompanied the arms of the conqueror, the victims having been, according to tradition, the vanquished chiefs of the country. Some of these godahs are now destroyed or deserted; but though the Patros are anxious for their re-establishment, and they have been urged to disregard the pervading prejudice and rebuild them without the wonted rite, they dare not face the ordeal. They declare that they are places consecrated by sacrifice, and that they cannot presume to dwell there without a fresh propitiation. They, however, make a compromise with their now somewhat shaken belief, by promising to do so under the personal countenance of the Agency. The Kondh, again, when pressed by the Borjiri Silo Patro, the representative of the Raja, and the supreme authority in the hills, to relinquish the rite, promptly refers to the direct countenance afforded to his custom by the first of the line to whom he pays allegiance; and the words "Gongo Raja tongo Projo," a kind of bye-word in common use, is intended to imply that he is only acting upon example—"as the king, so the people." Peculiar reference is made on such occasions to the immolation of the man to whom Bhimo Raja owed his first prosperity. Such being the feeling in the present day, it seems evident that human sacrifice marked the progress of Bhimo Devo through the hill country.

The Raja, on the conquest of the malo, remained some time at Udragiri, and from thence came down to Gopalpur, a village of the Bodo Kimidi Zemindari. He subsequently established his capital at

Vijayanagaro, regarding the selection and naming of which place, tradition asserts that while he and his court were hunting, a hare was seen to advance towards them, instead of fleeing to a place of concealment. Much astonished, and attributing the circumstance to some powerful influence of the earth, the Raja called a village in the vicinity by the name of "Vijayanagaro," or "the city or palace of conquest," and made it his residence. The image of his tutelary deity, under the name of "Manikeswari," "mistress or proprietress of a jewel," was there installed in a temple raised to its honour. The goddess Kali, or Durga, is worshipped under various names in the zemindaris of the Sirkar of Ganjam. Thus, in Athogodah, she is styled "Bhorandi;" in Moheri, "Kalna;" in Chikili, "Baraknari;" in Surabdah, "Kondoni Devi;" in Darakot, "Bodogodo" and "Sorgodo;" "Durga," in the Raj of Rayagodah. On the Bengal frontier she is known as "Bavorani" (Bhavani?); while in the Kimidies, "Manikeswari" is the chosen appellation. The Raja was accompanied by a brother, who separated, and founded the elder branch of the family, which has from that time reigned in Purlah Kimidy. Bhimo Devo reigned over that part of the country now known as Bodo Kimidi; while Sano Kimidi remained in the possession of a prince named Dharma Devo, regarding whose race or family tradition is silent.

The further history of this family, as confined to the descendants of Bhimo Devo, is as follows:—The founder was succeeded by his son, Ananta Padmanabha Devo. He bequeathed the throne to Pitamboro Devo, the eldest of three sons who conquered the present Sano Kimidi Deso, and annexed it to his own possessions. The Kimidis were then known as Kimidi and Poroloh Kimidi Rajio. Kamo Devo, the second, became a devotee and a pilgrim. Baso Devo, the younger, had a son named Purushottama Devo, who succeeded to the throne on his uncle's decease, and had four sons—Padmanabho Devo, Jaggonatho Devo, Chaitanyah Devo, and Hari Krishna Devo. The eighteen zemindaris contained in the Ganjam Sirkar having, ere this, passed under the control of government, and Purushottama Devo having incurred its displeasure, he was placed in confinement in Ganjam; and during that time, his second son, the elder having refused to do so, was permitted to visit him. On the death of his father, Jagannatho Devo succeeded him, in supercession of his elder brother, Padmanabho Devo, who, in consequence, formed a party, and raised the standard of revolt. The right of the younger to reign being proved, on investigation, to be untenable, it was thought best, in consideration of the strong party which supported him, to quell so

unhappy a feud by making a partition of the country ; when the elder received the original possession of the family, and resided at Vijayanagaro, or, as it is more frequently named, Digapundi ; and the younger established himself at Pratápagiri, or Puramari, the seat of the vanquished Dharma Devo. Thus, the possession of Bhimo Devo's descendants was divided into Bodo and Sano Kimidi. At this period the image of Manikeswari was surreptitiously removed from the Temple of Vijayanagaro, where it had rested since its first dedication, and was placed in a shrine at Puramari, under the care of Jagannatho Devo. It remains there at present, an object of peculiar veneration to the Gonjo Bonso family and their feudal descendants on the hills. On the adjustment of the feud, the two youngest sons were placed under the care of the reigning brothers respectively. Padmanabho Devo breaking into revolt, was imprisoned, and died in confinement. He was succeeded by his brother, Chaitanyah Devo, whose son, Pitamboro Devo, is the present Raja of Bodo Kimidi. Jagannatho Devo, who also died in confinement, was succeeded by his son, Chandramani Devo, who, under the influence of frenzy, induced, it is said, by the use of violent medicines, committed a variety of atrocities. He summarily imprisoned two officers of his Court, of the highest rank and influence—namely, the supreme authorities of the hill tracts, Nikananda Borjiri Silo Patro, the father, and Chaitanyah Harichandro Patro, the uncle of the present Lakshmano Borjiri Silo Patro, the representative of the Athoro Godah Patro family. Moreover, the Raja's family did not escape without ill-treatment, his wives, and his sons, Ardicondo Devo, Raghunath Devo, and Lakshimono Devo, being subjected to great hardship through his tyranny. The result was a general revolt, headed by the members of the Borjiri Silo Patro's family, who were set at liberty by the enraged people. At the solicitation of the Raja's wives, the insurgent leaders surrounded his palace, carried off his children, and kept them in a village called Babiliboundo, at the foot of the hills, which they fortified. Two years subsequently, the same parties forced the Raja to invest his eldest son with regal powers, when they retired to the village of Lukagodah, in the Bodo Godah Zemindari, and subsequently resided peacefully in the village of Siddheswara, in Sano Kimidi. About this period, a revolt having broken out in Parlah Kimidi, two rebel leaders, Ramoraj and Jerango Bissye, sought a harbour in the district of Panegunda ; and on Ardicondo Devo being called upon to effect their capture, with a promise of his confirmation as Raja on success, he declined to act. To Chandramani Devo, on the other hand, the restoration of his sons to his care was the reward attached to the due

performance of the task. He closed with the terms ; effected the capture ; and received his sons. Ardicoondo Devo refused to live with his father, and retired to Chicacole, where he remained until the death of the Raja, whom he succeeded, and rules at present over Sano Kimidi.

Neither the founder nor his successors appear to have been in the habit of visiting their hill domains in person. They resided in the plains, and confined their direct administration to the Raja, receiving a stated visit from their vassals, who presented their tribute of twelve rupees each to the Suzerain ; and, after a reinvestment with the insignia of their power, returned to their fiefs, or remained, in their turn of service, at the Court. At first, doubtless, the authority of the Raja was fully acknowledged, but of late years his name has become almost a shadow ; the attendance, visits, and tribute are alike discontinued, and in the northern part of the malo, independence everywhere prevails.

The Raja has been, from the first, the fountain of honour, and, as such, directed the investiture with the sari, or turban, at the annual visits of the Patros ; but the ceremony has now ceased for some years. The power and duties of the lord paramount are now exercised by the representatives of the Government, in the annual tour of the Agency. At the conclusion of the visit to each godah, the Borjiri Silo Patro, who is the representative of the class at the Court of the Raja, and now filling the same relation in that of the Agent, introduces the Patro and as many of his relations and officers as are entitled to the mark of honour, and invests them with the sari, which he receives at the hand of the Agent. In the present investiture, however, there is this difference, arising from the necessity of employing their services in the suppression of sacrifices, that the Government confers pecuniary rewards on the parties ; whereas, in the Court of the Raja, an equivalent for the honour conferred was exacted.

The claim of the Raja, as lord paramount, is acknowledged in courtesy by the Government, whose objects he is invited to aid, and he is duly informed of the result of operations ; but direct influence he has none.

Although the ancient kingdom of Orissa is shattered to pieces, and the lineal descendants of the house reduced to the condition of petty landholders, yet the punctilios of rank and birth are rigidly enforced. The Raja of Kurda is regarded as the fountain of honour by the greater part of the Zemindars of the Sirkar of Ganjam, whose ancestors held office in the Court of the Suzerain, and received lands on the tenure of performing specific duties, or as the meed of personal valour or special services. These families also acknowledge the claim of

royal blood on the part of the house of Kimidi, in common with that of Kurda; but the former descendants of the branch regard themselves as superior in rank to the latter—the representative of the illegitimate branch of the family of Orissa. In former days the Zemindars used to visit the Rajas of Kimidi, present a nuzzur of silk cloths, and make their obeisance; when they would receive marks of distinction—as a banner, an umbrella, or a fan. But this state has passed away, and the family has sunk into insignificance.

Whilst the founder of the house and his heirs maintained supreme control over the fertile vallies of the rajio, or zemindari, with the title of "Pat Raja," or "ruling prince," a junior branch was located at Gaddapur, on the verge of the malo, with the title of "Tat Raja," or "commander of the forces." The Tat Raja acknowledges his position as vassal, by periodical visits of homage to Vijayanagaro, and payment of tribute. It seems doubtful whether the Tat Rajas ever enjoyed farther influence over the inferior vassals than that derived from birth; since, while they remained in amity with the Suzerain, the godahs would not fail to pay allegiance to the blood-royal. Be this as it may, the authority of this branch has, since the time of the grandfather of the present Raja, been limited to Gaddapur and Surampur. On a succession, the ratification of the heir's authority by investiture with the sari, rests with the Raja of Sano Kimidi.

First in person and influence of the followers who aided in the subjugation of the Kimidis was the family whose representative was formerly known by the title of "Athoro Godah," but now by that of "Borjiri Silo Patro."

The term "Patro," corrupted into "Pater," is a Sanskrit word signifying, in literature, a "minister." In the hill tracts, the title is confined to the heads of the different godahs in their relation to the Raja, at whose Court they are required to attend and take a part in public affairs.

The title of Borjiri Silo Patro was conferred on Bunko Patro, by Purushottama Devo, in consideration of his services in confining in the hills his cousin, Ghon Devo, who was in arms against his authority. From that time the head of the family has been known in the rajio by this title, derived from two Sanskrit words, "borjiri," "an enemy," and "silo," "a trident"; but in the hills he is acknowledged as the Athoro Godah Patro.

¹ It properly signifies a vessel, whence it comes to imply any fit or capable person.—H. H. W.

² "Borjiri" is not Sanskrit, unless it be a corruption for "bajra," "thunderbolt," and "sila," (not "sila,") is "a stake," or, as "trisila," "a trident,"—H. H. W.

Lakshmano Borjiri Silo Patro is the representative of the family. He is the minister for the hill domains, and is equal in official rank, but superior in hereditary permanency of office, to the Deso Patro, the minister of the zemindari, whose tenure of authority rests entirely on the will or caprice of the reigning prince. He rarely visits the godahs in person, and is therefore not known except by report, as the representative of the family. His chief residence is at the palace in Puramari, of the internal arrangements of which he enjoys the entire control. Chandragiri is, so to speak, the baronial possession and residence of the family, which also holds Berikote and Panigunda under its immediate control, the officers entrusted with the management of affairs being appointed or removed at pleasure.

The rank of this officer may best be estimated by his position on various occasions of state and ceremony. For instance—at the annual investiture with the sacred cord, the Raja is seated on his throne, with his family ranged in order behind him; while the Deso Patro, and Borjiri Silo Patro, the highest in rank of his subjects, sit, the one on his right, the other on his left hand. The Raja is first invested; then the members of his family, in due succession; after which a family priest, standing before each minister, simultaneously perform the ceremony. The Borjiri Silo Patro annually places the sari on the head of the Raja, who, in return, invests his vassal with the emblems of authority. In the chase, the Raja receives the thigh, the royal share; the Deso Patro is entitled to a piece of the side; and the Borjiri Silo Patro to a portion of flesh. When travelling in the rajio, his palanquin is escorted by two men with torches.

In former days, when the Godiahs regularly visited the Court of the Raja, they first repaired to the residence of their chief, with whom rested the investigation and decision of all matters of dispute or grievance, and were then escorted by him to the presence of the Suzerain, who, on the presentation of the annual tribute, invested them with the sari at his hands. The Raja had no power to take cognizance of any matter connected with the Godiahs, or to interfere with the award of their immediate superior.

In Chandragiri, considered as it were the capital of the hill tracts, the power of the family is absolute. The Patro receives the royal share in the chase; is the sovereign in his own petty court and domain; and now, as the subject of the Government, remits the stipulated assessment into the treasury at Ganjam. Narayana Rajendra Patro, the younger brother of the Borjiri Silo Patro, whose duties detain him at the Court of Puramari, generally resides at the godah.

He is aided in the administration by the following officers :—

1. The Behira Daloyi.
2. The Sudra Ravi.
3. The Karji.

And after these, by twelve leaders of parks, who are styled, in the broken language of the hills, "Beharka," a corruption of the word "Vyavahárika," signifying "agents" or "managers." These are military commanders, and are entitled to a double share of the spoil in the chase.

Their titles are as follows :—

1. Bodo Prodano, or Chief Prodano.
2. Bodo Dondasanno, or Chief Dondasanno.
3. Bodo Kohouro, or Chief Kohouro.
4. Sano Prodano, or Subordinate Prodano.
5. Sano Dondasanno, or Subordinate Dondasanno.
6. Bodo Naik, or Chief Naik.
7. Sano Bodo Kohouro, or Subordinate Kohouro.
8. Koto Doloyi.
9. Maji.
10. Goroyi.
11. Hondia.
12. Dolopath.

Of these, some represent classes, as the Bodo Kohouro, or head of that caste; and others specific offices, as "Bodo Dondasanno," a "chief executioner." Independently of the above, there are, at Chandragiri, four families designated "Bholo Noko," or "Councillors," and with whom the titles of "Gojindra," "Maharta," "Goroyi Patro," and "Orisi Sollo" are hereditary. These are invested with the sacred cord by the Raja, while the sari of office is granted by the Borjiri Silo Patro.

Owing to this investiture with the sari, these officers are classified under the name of "Sariahs;" and a number of such, varying according to circumstances, compose the immediate Council, and are the executors of the will of the Godiahs in the malo. They formed, doubtless, together with the representatives of their Kondh subjects, their escort when visiting the Court of the Raja, as they now accompany them into the presence of the Agent. The Court of Chandragiri may be regarded as complete; and, with the exception of the families of Councillors, a similar number of officials are maintained at Gaddapur, Suvarnagiri, and Berikote; while at Mahasinghi, and the various subordinate godahs of the malo, the retinue of the Godiahs is limited to two or three Sariahs. A party of Paiks, varyin according

to the wealth and influence of the Godiah, constitutes the low order in the body under his control.

The junior branches of this family consist, at present, of Chaitanyah, Harichandono Patro, the uncle, and Narayana Rajendra Patro, the younger brother of Borjiri Silo Patro. On these devolves the duty of an annual visit to the godahs of the malo. The former of these is an aged man, and well known in the hills; the latter is young, and full of fire and energy, while treated with marked distinction, and vested with irresponsible powers at the Court of the Raja. As the representative of the Athoro Godah Patro, he is regarded by the Godiah as his raja, and receives the homage conformable to the customs of so rude a country.

On approaching the godah, he is met by the Godiah and his Sariah followers, when the former salutes him with a low obeisance, presents the feudal tribute, washes his feet, and escorts him with music to his house, before which a spot has been swept and purified. Here are placed a lamp and a vessel full of water, in which a small branch of the mango-tree is immersed. The wife of the Godiah brings some rice, and, showing it to the Athoro Godah Patro, describes a circle around his head with joined palms; which done, she throws it away, and sprinkles the water on the roof of the house. He is then escorted to a house set apart for him, where he resides, his charge being borne by the Godiah. Matchlocks are fired off on his arrival, and the Kondh subjects of the godah assemble to give him welcome. Should a beast of the chase be presented, he receives it, and distributes it at his pleasure.

He is entitled to a moiety of the dues payable to the Godiah. On the decease of an Uriya without heirs, a moiety of the property escheats to him. He also receives a similar portion of the mulct levied on misdemeanours punishable by the Godiahs. Faults of a graver nature, or committed by the former against the common good, come under his immediate consideration. On the death of a Mallika, or Kondh head of a village, the selection of a successor rests with him, when he receives the customary fees, of which he retains a moiety, and distributes the remainder to the Sariahs of the godah.

As the Godiahs have ceased to repair to the court of Puramari, the adjustment of dues and fines has taken place, of late years, at the periodical visit of supervision. On his departure, presents in money are offered according to the means of parties, and he is escorted with honour to the next godah.

In the superscription of letters he is styled "Raja Sri;" and the Godiah, who receives his commands with entire submission

employs the term of "Obodhan¹," signifying, literally, "may your attention be directed towards me," in addressing him; while he, on the other hand, uses towards the former language only applicable to an inferior, and hesitates not, on occasions, to adopt that of anger, reproach, and command.

We have seen how the founder of the house of Kimidi immolated human beings in honour of Manikeswari (Durga), on first coming into contact with the votaries of Meriah sacrifice; and, with reference to the same rite, it is a curious fact that the full ceremonial, saving the effusion of human blood, is maintained at the present time during the Durga Púja at Paramari. On the last day but one of that festival, the image of Manikeswari is removed from its temple, under the immediate superintendence of the Raja, to a temporary building constructed of branches, called the "Meriah Ghorah," or "Meriah House," where the rite of Meriah sacrifice is duly performed, a goat being substituted for the human victim. The Borjiri Silo Patro presides, a Brahman officiates, and a party designated "Maji," slays the animal. If to these facts be added the additional circumstance, that the rite commences, as a rule, at Gaddapur and the southern parts of the malo, and is taken up in succession from godah to godah, until the obligation terminates on the northern boundary, it may be reasonably inferred, not only that the initiative was, until of late, given in the Court of the Raja (the substitution of the animal being of recent origin), but also that the rite of the Kondhs—hitherto inaccessible, and consequently not subjected to external influences—bears a close affinity to the early worship of Durga. These suppositions are further strengthened by the general opinion, that in parts of the low country, generally under control, human blood, under the supposed warrant of extreme distress, occasionally flows in secret upon her altar. The conclusion can at least be drawn that the Meriah sacrifice finds other advocates besides the rude Kondh, and that nothing short of direct European intervention will shake its hold on the prejudices and affection of most classes; it being my conviction that the Hindu mind generally, but especially in the zemindaries adjoining or connected with the hill tracts, views our intentions with distrust.

As the Godiahs became estranged from the Court of Paramari; and established in the north a virtual independence, the connexion of

¹ "Avadhana," Sanskrit, "attention." In this, as in the proper names, and in all the other words of Sanskrit origin, we have the corruptions of vulgar Bengali pronunciation: *b* substituted for *v*, and *o* for *a*, as "Bhimo Debo" for "Bhima Deva," "Patro" for "Patra," &c.—H. H. W.

the Athoro Godah Patro with the malo was weakened, and his visits became more and more rare, until they were confined to the south, and almost exclusively to Suvarnagiri, for many years past. Kurtali alone, of the northern godahs, had been occasionally visited, when the entrance of the Agency on the field restored the influence of the family. Summoned by the Agent to accompany him and aid his operations, Harichandono and Rajendra Patro have, during the last two years, visited every godah, and met with the honours sanctioned by usage. Their authority, unhesitatingly acknowledged, has been zealously employed in furthering the objects of Government; and the untiring exertions of Rajendra Patro in urging the Godiahs to practical co-operation, or, when the necessity of the case demanded it, performing the required duty in person, cannot be over-estimated. To those men the Meriah sacrifice is not a source of advantage; consequently, excepting from prejudice, its continuance is not an object of interest; while the operations of the Agency involve the restoration of their authority, and its accompanying profit. They may, therefore, be regarded as, in a measure, bound by interest to the suppression of sacrifice, and already contemplate the advantages which must accrue to themselves in the amelioration of the condition of the people through our influence. Maintained in their right position, and regarded as the highest native authority in the land, only inferior to the Agent himself in power, their co-operation may be considered sure, and, indeed, it is essential to success; for, as the Kondh is inaccessible except through the Godiah, so the latter will not counteract the wishes of the Athoro Godah Patro, whom he regards as, in a special sense, the Malo Raja, while he acknowledges the nominal supremacy of the Gonjo Bonso family. Harichondono Patro and Rajendra Patro, in the suppression of Meriah sacrifice, form the first link in the chain of responsibility, within which it was endeavoured to enclose every party of influence in the land. They consider themselves engaged to guard against any infringement of the compact entered into by the Godiahs to discountenance the rite, and denounce those who perform it as disobeying the orders of the Government.

The above allusion to the Borjiri Silo Patro, in his relations with the malo, naturally leads to the consideration of the godahs over which he exercises control, and which may best be divided into those instituted by Bhimo Devo, and others subordinate to them, which derived their origin from motives of convenience, or from family dissension.

Under the first head are the Godiahs of Suvarnagiri and Mahasinghi, the Godiah of the former being superior in position, while

the representative of the latter takes the precedence in respect of blood.

When Bhimo Devo overthrew the dynasty of Suva Chandro Devo, he selected the ancestor of Bahadur Patro, an armed retainer of the Bonko caste, to rule over the country, and fill the position of Chief Godiah, next in rank to the Athoro Godah Patro; and, with this view, ennobled him with the "Chitta Poito." Bahadur Patro, the representative of the family, has, consequently, no claim to birth; but his superiority as a Godiah is acknowledged in the district of Mahasinghi, where he is received with suitable honours.

The following anecdote is illustrative of the manners of the Godiahs, and accounts for the comparatively degraded condition of those in the northern portion of the malo. A Patro of the Mahasinghi house repaired—says the tradition—to the Court of the Raja, leaving his mother and wife at the godah. He remained in attendance for twelve years; and on his return, was unable to recognize the latter, and gave her the salutation due to the former—a grievous offence against propriety. The unfortunate man was unmercifully assailed by his cotemporaries; and so chagrined was he at the breach of decorum which he had unwittingly committed, that he refused to attend at the Court, and prayed the ancestor of Bahadur Patro to take the post of honour, which he was henceforth unworthy to fill. From that time the duty devolved on the latter family, and the former ceased to visit the plains. This event occurred about seventy years ago; since which time the Godiahs of Mahasinghi have declined in power and appearance, becoming daily more and more assimilated with the Kondhs in sympathies and habit.

With the exception of his two brothers—the elder of whom resides at Suvarnagiri as the minister of the Chief, and the younger is Patro of Tumerebundo, where Bahadur Patro also resides—the subordinate Godiahs are in no way connected with him beyond the relation of vassalage, being of various families and peoples, and placed over portions of the country with a view to strength of control by the family, the authority of which was formerly absolute. But at present the sway of the Patro of Suvarnagiri over the frontier Godiahs is either rejected, or nullified by feud and intrigue. Of these—which consist of Gums Godah, Bellagodah, and Lonkagodah—the second alone acknowledges the lordship of Bahadur Patro. The first is independent of any control, while the last leans towards the house of Kalahandi. The sympathies of Gojindra Patro, the Godiah of Kologodah or Koshlogodah, who is descended from an illegitimate branch of the Tova Mula family, the head of which is a Tat Raja under

Kalahandi, flow in the same direction ; while his royal blood induces him to range himself under the banner of the Tat Raja of Gaddapur, rather than pay fealty to Bahadur Patro, whose personal influence is thus circumscribed within narrow limits. A reconciliation was effected between Gojindra Patro and himself ; but there appears to be little doubt, that their feuds are, in a great measure, owing to harsh and oppressive proceedings on his own part, as he does not appear conspicuous for justice in the decision of such matters as come within his jurisdiction.

Bahadur Patro is united in sympathy and interest with the Kimidi family, by whom his ancestor was ennobled, rather than with the godahs, or the countries lying to the westward of the malo. While others boast a royal, or even fabulous descent, and regard Kalahandi or Bastar as the home of their fathers, he is, in feeling and appearance, simply a Sirdar of Samasthanam Paiks, and a servant of the Raja. He does not, as others, preside at the Meriah sacrifice, or regard it with greater favour than the Hindú in general. But he is an enemy to innovation ; and the predominant feature of his character is, an intense fear, real or assumed, of the enmity and vengeance of the Kondhs. In former days, and under different circumstances, he is said to have done good service when the Godiahs of the north were in rebellion ; but when he approaches the Meriah question, his energies seem paralysed. Urged almost to desperation, he makes a convulsive effort, and affords a partial aid to the Government. His officials and paiks, the latter numbering about two hundred matchlocks, following their chief's example, retard rather than further the good work of suppression. These hindrances, however, must be met and overcome by patience and judgment ; for it is by these instruments that the work must be effected, if we would desire to leave a good impression of our intervention upon the people at large.

The consideration of the family of Bahadur Patro is simple ; but the origin of the dispersed branches of that now represented by Guui Patro, of Mahasinghi, is involved in obscurity. It is, however, clear that Kalahandi was the birthplace of its members in times previous to the invasion of the Sano Kimidi Malo by Bhimo Devo. A fabulous as well as royal origin is claimed. As regards social rank, they are Uriya Brahmans ; and the family is known, until the present day, by the title of "Nolo Bonso,"—also enjoyed, it is said, by the Rajas of Kalahandi and Jaypur.

The fabulous origin of the family indicating an antiquity, which, among a people so wholly illiterate, may be confined within narrow limits, in an article of faith generally received, and is described as

follows :—A Brahman widow, who supported herself by begging alms in the neighbouring villages, lived at Amaravati, in Kalahandi. In her wanderings she frequented two roads, on one of which she always met with success, and on the other returned empty-handed. Curious to ascertain the cause of success, she remarked that a pigeon had built a nest, and was sitting on her eggs in a bamboo tree. She secured the eggs and carried them home, when, in process of time, two male infants issued from the shell. Regardless of opprobrium, the widow reared the children, whose names were Sava Chandru and Bahau Chandra. The eldest received the daughter of the Raja of Sano Kimidi in marriage, with the malo as her dower. The issue of this marriage was the Nolo Bonso family—"Nolo" signifying, in the Uriya language, "a tube" or "pipe," such as the stem of the bamboo. With reference to the hold of this tradition on the minds of the Nolo Bonso Patros, it may be remarked, that the pigeon is regarded with peculiar veneration, and its flesh scrupulously avoided. The Raja of Sano Kimidi belonged to that line of princes which became extinct when Dharma Devo was dispossessed of his raj by Pitamboro Devo, the grandson of Bhimo Devo, while it is possible that Sava Chandra Devo's invasion may be identical with, or at least that he may be a descendant of, that Sava Chandra, who received the malo in dower. Amaravati, literally employed as the name of the palace of Indra, is also mentioned as the site of a temple, from which, propitiated by human sacrifice, the goddess Manikeswari Devi came forth to accompany the enterprise of Bhimo Devo.

The cause which led to the introduction of this family into the malo is, as regards Mahasinghi, given as follows, by a party residing on the borders of the Boad Hill Tracts. It is meagre in detail, and similar in character, with the reason assigned for the influence of the Bissyes of the neighbouring malo—the union of the priestly office with the regal power. Traces of a previous Uriya population are also visible. The narrator, a member of the Rogo Patro of Barakommah, states as follows :—"We are of the Nolo Bonso race, and formerly dwelt in Kalahandi and Bastar. At the time of our first connexion with the Kimidi Malo, people of the Uriya race, called 'Kaunu Baranga,' 'Nakko Baranga,' 'Tomakanga,' and 'Punjikings,' inhabited the malo, as also that of Boad. By caste, they are Amoniaeto and Bakto. Though Uriyas, they were unfitted to perform the worship of their tutelary goddess, having become eaters of flesh and drinkers of spirit, and have assimilated with the Kondhs. They invited us into the country from Kalahandi and Bastar, and located us in Jarasingi. In those days there was no Raja in the malo;

but, resolving to appoint one, they took us to Balskapah, of the Boad Malo, and there administered to us an oath of fidelity. In proceeding to the nomination of a king, they made a hearth of unbaked clay ; as also an earthen vessel, in which they cooked rice. Then they cut open the stomach of a pregnant woman, and, tearing off the skin, formed of it the cover of a drum to precede the Raja. They determined upon the following omen : if they could split a bundle of green bamboos with a blow of an axe, they would elect a Raja. It was so done, and a person nominated to the dignity. They brought us from Balskapah, and established us at Mahasingi. Subsequently we divided, owing to domestic dissensions, and settled in various parts of the country."

In regard to this tradition, it will be borne in mind that the body of Uriyas in the malo is called collectively "Amoniaeto," and forms the last clause in the formula quoted in page 20, and forming the ground-work of the present inquiry.

In consonance with this tradition, the worship of the tutelary goddess of the village is thus given. The "Jani," a title common to both Uriya and Kondh, holds a fast for two days. He then carries the sword, which is her symbol, to her temple ; performs his ablutions ; and, clothed in wet garments, besmears the shrine with cow dung ; he then lights a lamp, and pours milk and clarified butter over the image. Next day the people, with drums and music, bring a goat for sacrifice ; the head of the victim is washed, and rice and turmeric flour poured upon it. Seven lines are then drawn on the ground with the rice and turmeric, and twenty small portions of the former are placed on leaves ; the victim is then slain, and its head placed upon the rice ; when the officiating priest thus addresses the goddess :—"O great goddess ! the Kauna Baranga, and others, dwelt in the land, and thou wouldst not eat rice at their hands, nor receive the offering of blood ; thou causedst us to be brought hither, to make us rulers. We therefore offer this to thee with outstretched hand ; we give thee the blood : drink it, we pray thee ! We sprinkle the image with water, exclaiming, Destroy us not ; deal not falsely with us !" He then distributes the flesh of the victim to all present, saving the head, which it is unlawful for any but the priest to touch. Should a buffalo be sacrificed, on the conclusion of the same ritual the carcase is deposited without the temple, and devoured by the Kondhs. When a person suffers from fever, or is subject to adversity, fowls and eggs are employed as offerings. In the outer portion of the temple is a goddess styled "Dua Suni," at whose door three lines, marked by rice and turmeric, are drawn ; and the offerings being presented to her, are devoured by the Domba.

The dues of the Godiah are three sieves full of rice from each village annually. In the chase, he is entitled to the thigh—the test of his authority. A moiety of the property of an Uriya, who may die without heirs, escheats to him. On the death of a Malliko he receives a buffalo; and at the investiture of his successor, presents of various amounts. Irrespective of this, he has no further influence in the internal arrangements of a Kondh community.

The Godiah and his followers are a corporate body, of which the former is the chief executive. He is empowered to visit with a fine, within certain limits, the misdemeanors of his subordinates; but, on the other hand, should he offend against the common good, the Uriyas can arraign, and on conviction, suspend him until the pleasure of the Borjiri Silo Patro be known. As a corporate body, they are addressed “Somosto Dolo,” “Bahurka,” “Behera Doloji,” and “Patroiko;” or, “to the body of the Dolo or Uriya people;” “the official servant,” “the head of the Dolo,” and “the Patro.” And, again, in addressing their superior, the Borjiri Silo Patro, the expression “Somosto Dolo,” “Raja Sri Borjiri Silo Patroiko Jonano,” or “the body of the Uriyas.”

Of the immediate subordinates to the Godiah, the “Behera Doloji,” or, as he is styled in other places, “Dolbeherah,” and “Dolopatti,” words signifying “the commander of an army,” holds the first rank. He is generally found to be in charge of some village or subdivision within the jurisdiction of the Godiah. Thus, under Rajindra Patro, the Godiah of Chandragiri, the immediate control of Panigunda rests with Chokra Behera Doloji. In Mahasinghi, they style themselves “Brahmano Bonso,” claiming origin from a Brahman who accompanied the Nolo Bonso Patro into the malo. The two classes intermarry.

The “Pradhani,” signifying “a chief,” or “head-man,” is also vested with power similar to the Dolo Behera. Purushuttamo Pradhani superintends Srirampur, subject to the Tat Raja of Gaddapur. The above titles are applied in the plains to the head-man of a village.

The “Dondasanno,” or “executioner”; the “Dakkua,” whose office it is to summon the Kondhs; and the “Pujari,” or “village priest,” comprise, in the northern godahs, the “Behurka,” who carry out the Patro’s wishes, and form his council. These men, being Uriyas, join the latter in a common bond to give their utmost aid in the suppression of human sacrifice; and their word is considered to embrace within its condition the “Somuto Dolo,” under which head may be included the “Paika,” or “armed retainers,” who are of two castes—the “Santo,” a class of men who claim royal descent through

an illegitimate channel; and the "Omaitto," which title signifies "steel," and indicates their profession.

A few artisans reside at the godah, consisting of the "Goroyi," or "carpenter"; "Loharo," "blacksmith"; "Gondo," "herdsman"; "Lambaro," "potter"; "Sundi," "distiller"; and "Bondari," "banker." The "Mali," or "worshipper of Siva," is occasionally met with; and one family of the Brahman caste resides at Gaddapur.

The "Domba," or, as he is called in the plains, "Pano," is an outcast, and lives outside the godah. He is by profession a trader, frequenting the fairs, and supplying the wants of the Patro, who never repairs there in person. He also manufactures rings and ornaments of brass, weaves strong cloths, and is the musician at the festivals of the Uriya or Kondh. As in the Malo of Boad and Gumsar, here also his chief profits would spring, were it not for our intervention, from the sale of children for sacrifice.

The "Haddi," or as he is styled by the Kondhs "Gabangu," is the same class as the Pariah of the plains, though he will not partake of food with them. He is by trade a basket maker, and also performs menial offices in the Uriya quarter of the godah.

ART. II.—*Chronology of the Medes, from the Reign of Deioces to the Reign of Darius, the son of Hystaspes, or Darius the Mede.* By I. W. BOSANQUET, Esq.

[Read June 5, 1858.]

THE origin and duration of the empire of the Medes, which occupied so important a position in early Asiatic history, has been the subject of attention to many recent writers. The Lectures of Niebuhr on the Medes and Persians are probably familiar to us all. Dr. Leonard Schmitz, the translator of Niebuhr's works, has recently published his matured views on the same subject¹. Mr. Johannes Von Gumpach² in 1852, Professor Brandis³ in 1853, and Jacob Kruger⁴ in 1856, have also expressed their views upon Median history and chronology; and within the last twelve months, the works of Marcus Von Niebuhr on Assyrian and Babylonian history, and the translation of Herodotus by the Rev. George Rawlinson, have appeared, embracing and commenting upon the early history of the Medes.

These writers have all treated the subject more or less upon the same chronological outline, which has long been accepted as defining the true limits of the history of the Median empire; and as they have already explained in the most efficient manner all that can be said in their particular view of the subject, it would be hopeless to attempt to add anything new or interesting to what they have advanced, while merely treading in the same track. Having, however, frequently expressed my conviction that the commonly received chronology of the Median empire is far from correct, and that all these writers, therefore, must have built their scheme of history upon a false foundation; and being persuaded that sufficient data are in our possession for framing a far more correct system of dates; it will be my object to lay before you as briefly as possible, first, a corrected outline of the chronology of the period, and then to point out some new historical combinations which necessarily flow from the altered position of the several contemporaneous kingdoms, which I trust may prove not uninteresting.

It is not my intention to touch upon those extremely remota

¹ Schmitz's Ancient History.

² Die Zeitrechnung der Babyl. und Assyrier: Chronological Table.

³ Rerum Assyriarum tempora emendata, pp. 1—10.

⁴ Geschichte der Assyrier und Iranier.

periods of Median history, referred to by Berosus and the later Arabian historians, who speak of Median dynasties which would carry us back to the time of Nimrod in Assyria. Nor will I detain you by discussing the merits of Median history as delivered to us by Ctesias, from whom we have received an account wholly irreconcilable with Herodotus, contradicted by contemporaneous Hebrew writers, and unsupported by recent monumental discoveries. But following the simple narrative of Herodotus, I will proceed at once to fix the chronology of those four kings of Media spoken of by that historian as having reigned from the time of the revolt of the Medes from the Assyrians, down to the conquest of the Medes by the Persians. According to Herodotus—

Deioces, the first king of Media, reigned	53 years.
Phraortes, his son	22 "
Cyaxares, his son	40 "
Astyages, his son	35 "

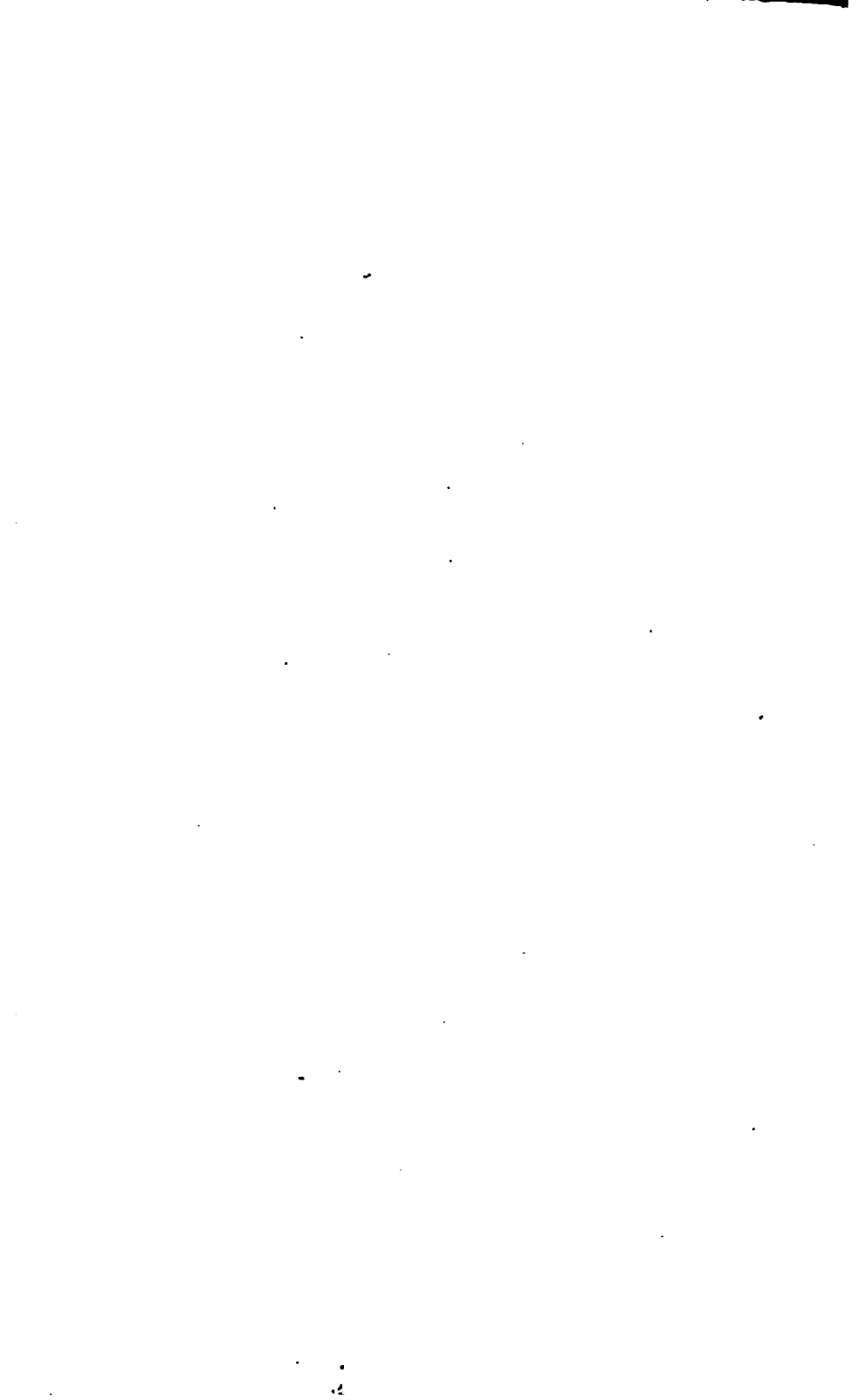
Making together a period of 150 years

Now, assuming the correctness of the length of each of these separate reigns, it will be sufficient, if we can determine with exactness the chronological limits of any one of them, to establish the correct position of all four reigns throughout the hundred and fifty years. Let us, then, select, for the purpose of examination, the reign of Cyaxares, the third Median king.

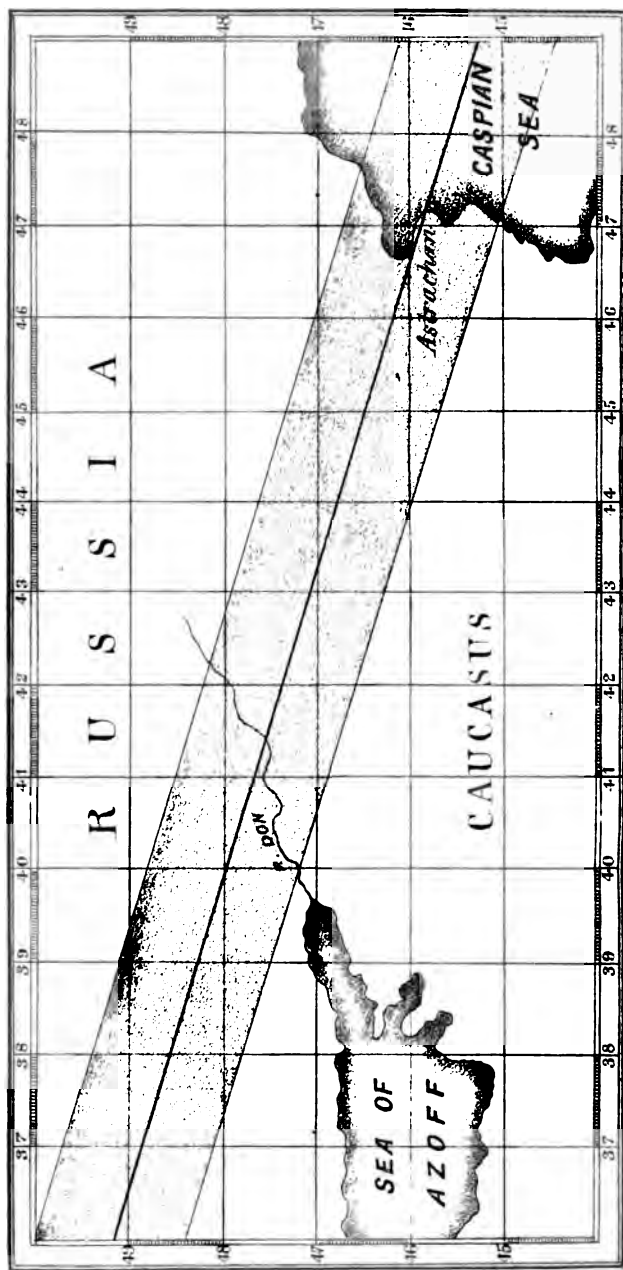
In his reign a remarkable solar eclipse is spoken of as having led to important events in Median history, and this eclipse affords the means of fixing the time of the events with extreme accuracy. Cyaxares had been at war for six years with Alyattes, king of Lydia, during which no great advantage had been gained on either side. While they were engaged in fighting their last battle, suddenly both armies were involved in total darkness, or, as Herodotus describes it, day was *suddenly*¹ turned into *night*². Such sudden and total darkness, it is well known, can only be produced by a total eclipse of the sun—a very rare occurrence at any particular spot in the world. No partial eclipse, however large, as instanced by the almost total eclipse which

¹ *ἐξαίφνης*, "suddenly." The sudden failure of light on this occasion forms an important element in considering the nature of the eclipse. An eye-witness of the total eclipse in Norway in 1853 observes: "As long as the least bit of the solar disk was visible, there was a diminution of light, though not absolute darkness; but, the moment the disk was completely covered by the moon, darkness was as suddenly produced, as when in a room the last candle out of several is put out."

² Herodotus, L. i. 74.

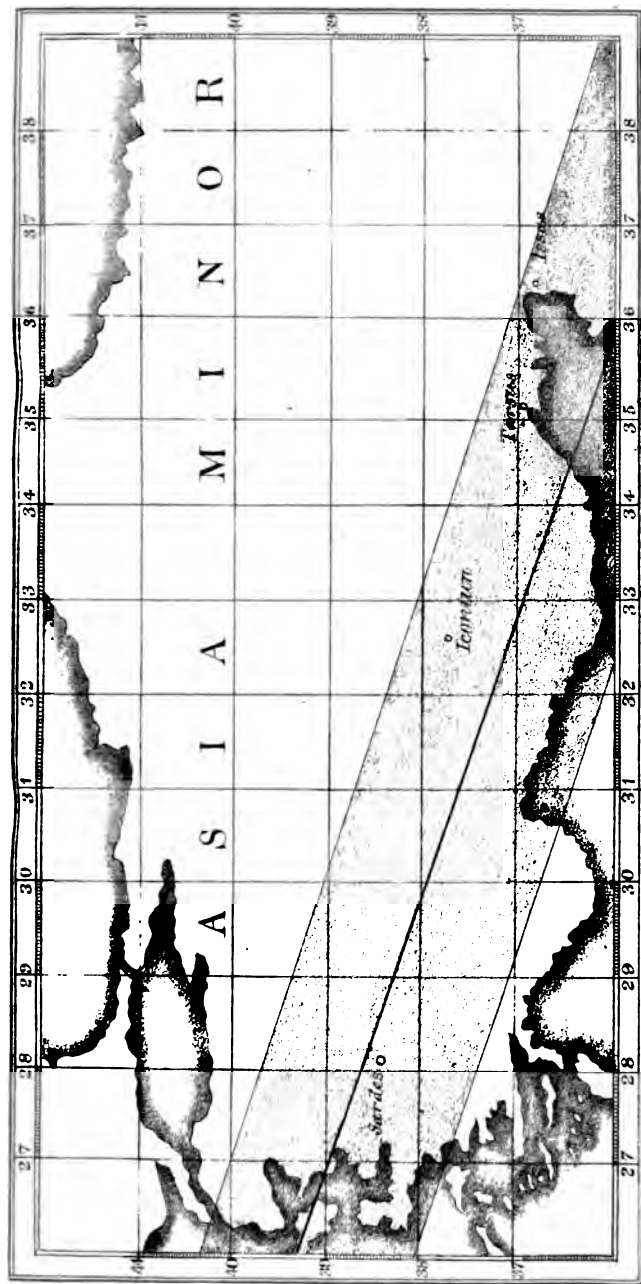


ECLIPSE OF B. C. 610.



Drawn according to data furnished by Mr. Airy, and calculated according to Hansen's tables

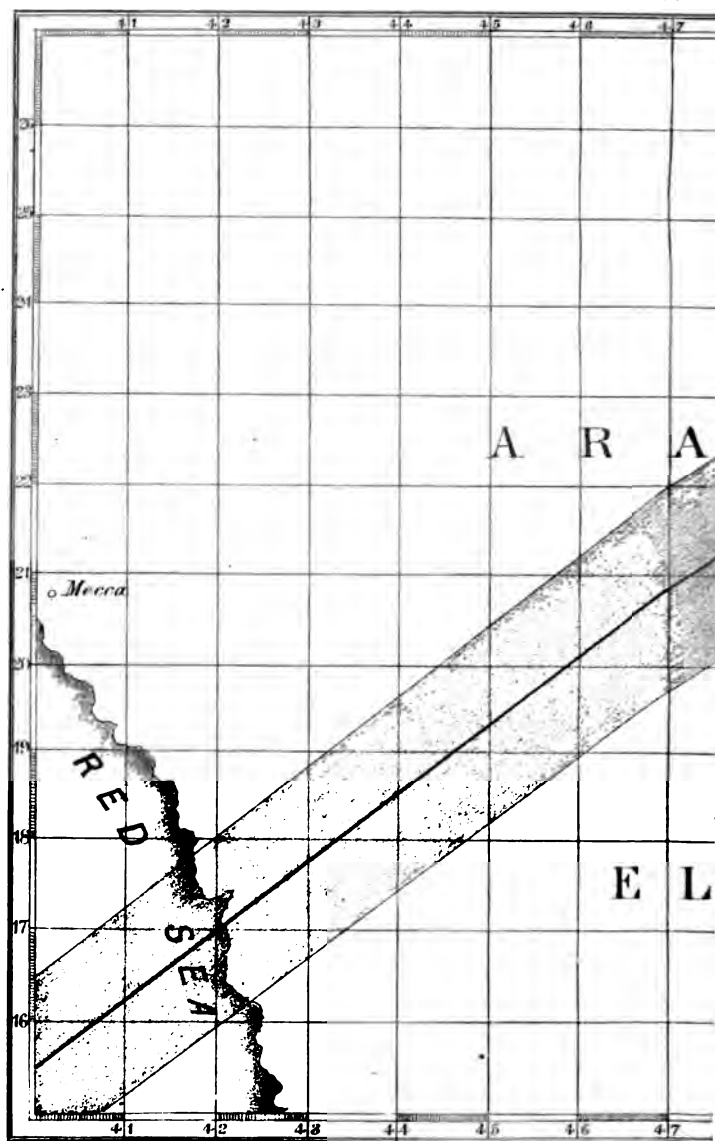
ECLIPSE OF THALES B.C. 585



Copied from Mr. Argy's Maps, and calculated according to Hansen's tables.



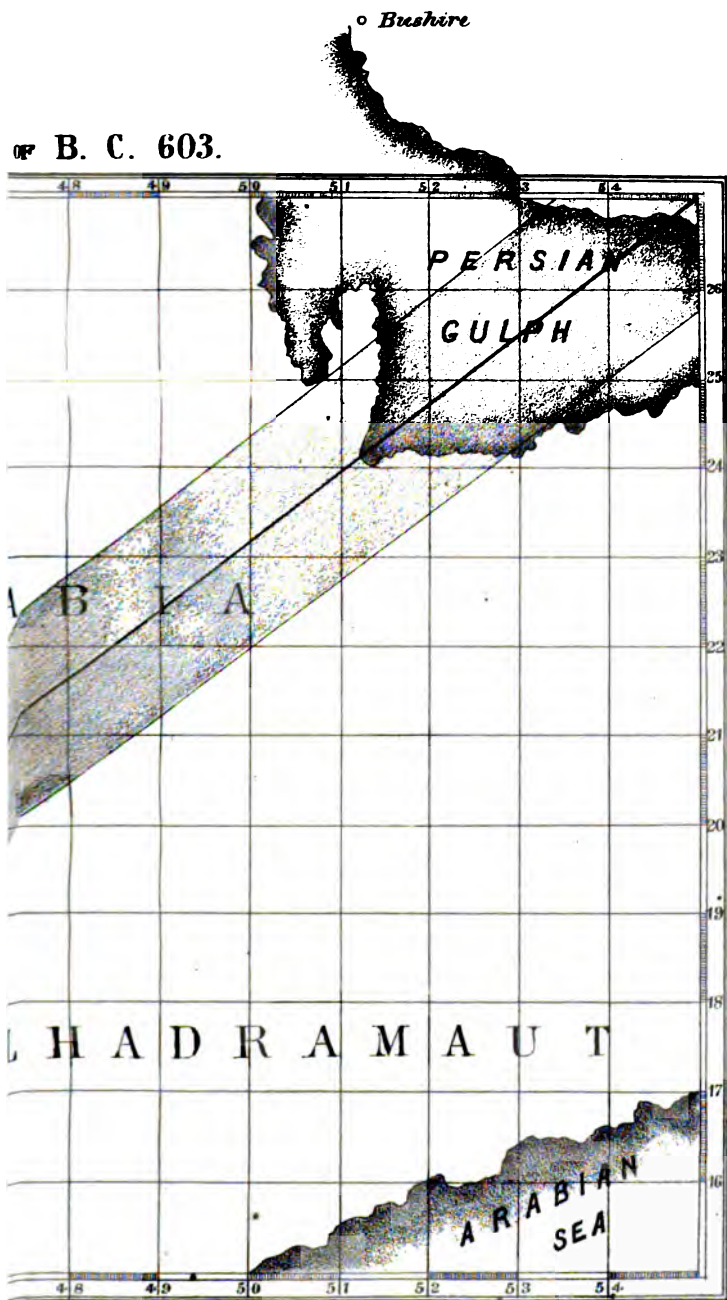
ECLIPSE O



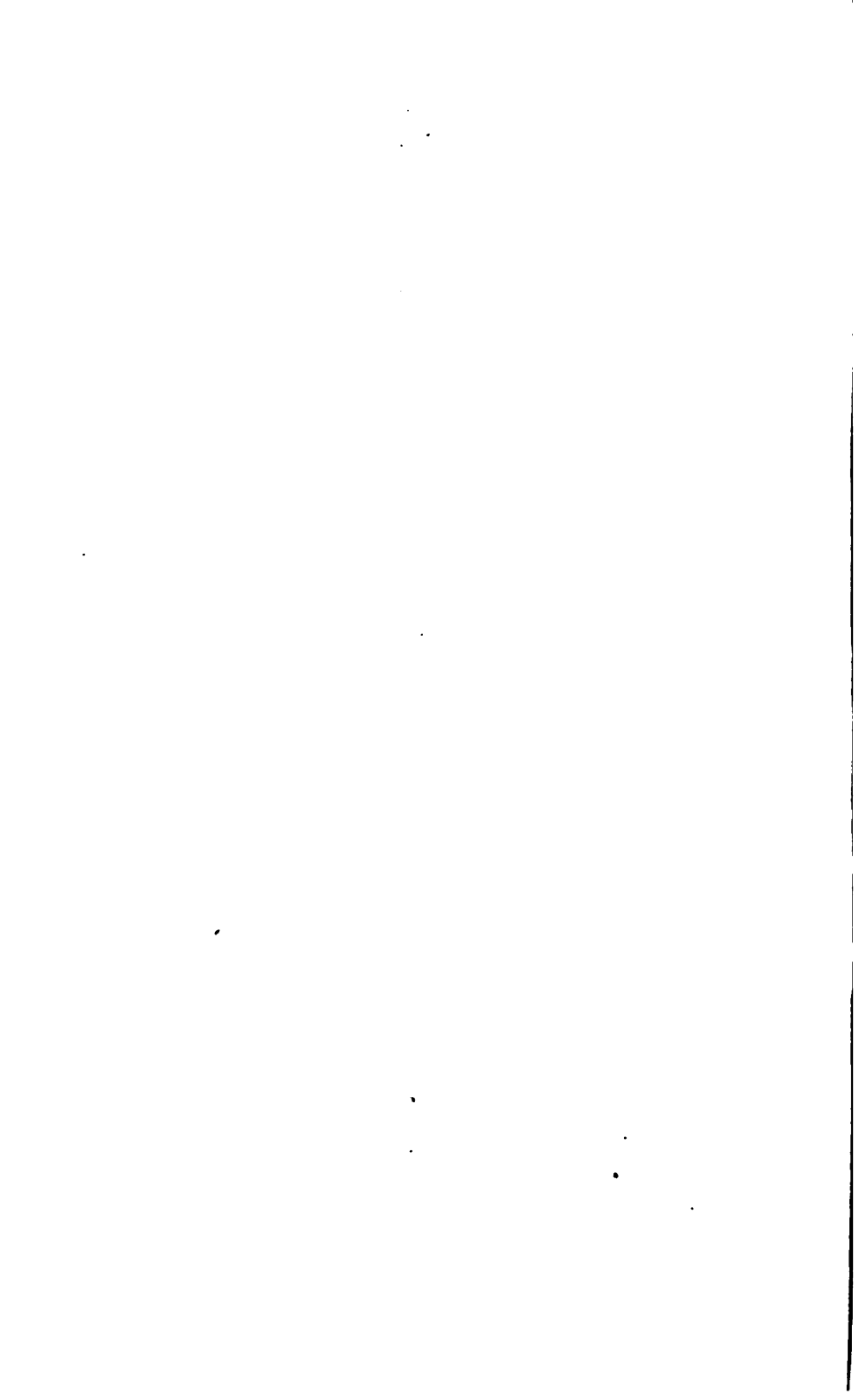
ARTIST: A. G. G. 11th

Drawn according to data furnished by

of B. C. 603.



by Mr. Airy, and calculated according to Hutton's tables.



occurred in this country on the 15th of March last, in any degree approaches the awfulness of a total solar eclipse, as described by those who have witnessed the phenomenon¹. There was nothing in the effect of the eclipse of March last (though the apparent diameters of sun and moon were so nearly equal, that it was doubtful beforehand whether the eclipse would be total or annular) which would have attracted the attention of two contending armies. On the occasion, however, of the battle between the Lydians and Medes, the armies were so terrified that they desisted from fighting. Peace was forthwith made between the two kings, and sealed by a matrimonial alliance between Astyages, the son of Cyaxares, and Aryenis, the daughter of Alyattes. Both the sudden darkness and the terror created mark a total eclipse. Herodotus adds, that this eclipse had been predicted to the Ionians by Thales, as about to happen in their country in the very year in which it occurred.

If, then, we can fix the date of this eclipse, we shall of course know the exact date of this important battle, which, we are told, preceded the fall of Nineveh², and obtain one fixed point in the reign of Cyaxares. We shall also know the year of the marriage of Astyages, grandfather of Cyrus, from which to estimate the probable time of the events which occurred in his grandson's reign. Now, there are only three eclipses which were total in that part of the world during the fifty years which elapsed between B.C. 630 and 580, within which interval the battle must have been fought, which can possibly be supposed to have occasioned the awful darkness which led to such results—viz., the eclipses of B.C., September 610, May 603, and May 585. The astronomers Mayer, Costard, and Stukeley, in the last century, calculated, according to the imperfect knowledge of the moon's motion of their day, that the eclipse of B.C. 603 was that which put an end to the battle between the Medes and Lydians³; and Dr. Hincks still endeavours to contend for that date⁴. The eminent German chronologist Ideler⁵, on the authority of the astronomer Oltmanns, his countryman, fixed upon the year B.C. 610, which has since been generally received: and this is the date adopted by Mr. Grote⁶. Both these years well agree with the reckoning of the common chronology. They are both, however, at variance with the ancient traditional date,

¹ "The phenomenon, in fact, is one of the most terrible that man can witness; and no degree of partial eclipses gives any idea of its horror."—Airy's Lecture at Roy. Inst., Feb. 4, 1853.

² Herod., L. i. 103—136.

³ Philosophical Transactions, A.D. 1754.

⁴ Athenæum, Aug. 16, 1856.

⁵ Handbuch der Chron., vol. i. p. 209.

⁶ Grote's History of Greece, vol. iii., p. 314, note 2.

which, by Pliny¹, is fixed to the 4th year of the 48th Olympiad=B.C. 585; and Clemens Alexandrinus² and Solinus³, who speak of the 50th and 49th Olympiads, can only point to the same eclipse.

You are, perhaps, aware, that from the year 1852, when the attention of astronomers was recalled to this subject⁴, up to the present time, the determination of the true date of this eclipse has been a matter of investigation with several eminent European astronomers, as being a question of great astronomical importance in connexion with the lunar theory, independently of its historical interest. In the course of their investigation, the supposed position of the moon's shadow during each of these three eclipses has come under consideration, and has been subjected to the test of its conformity with the actual known position of the moon's shadow during several eclipses of a later date. In the year B.C. 310, just three hundred years later than the eclipse of B.C. 610, we read, in Diodorus⁵ and Justin⁶, that Agathocles, tyrant of Syracuse, while conducting his fleet from Syracuse to a spot near Cape Bon, on the coast of Africa⁷, fell in with an eclipse. His fleet had been chased by the Carthagenians on leaving Syracuse the preceding day, and is said to have escaped in the darkness of night. On the following morning, about eight or nine o'clock, a sudden darkness came on which greatly alarmed his crew, and the stars appeared. On the morning of this eclipse, we are certain that Agathocles must have been somewhere within one hundred miles north or south of Syracuse, and the shadow of the total eclipse which enveloped his fleet must, therefore, have fallen within those limits. Now it is found by calculation, that the same theory which would bring the moon's shadow, in the year B.C. 610, so as to throw the zone of total darkness any where over Asia Minor, would necessarily so lower the position of the shadow of the eclipse in the year B.C. 310, as to throw it over the continent of Africa far too much to the south for any possible position of the fleet of Agathocles to have been touched by it: and the same theory which would raise the position of the shadow in B.C. 603, so as to cause the zone of total darkness to pass anywhere near Asia Minor, would so raise the position of the shadow in the year B.C. 310, as to throw it far too much to the north for any possible position of Agathocles to have been reached by it: while the theory which brings the shadow of the eclipse of B.C. 585, where ancient history leads us to infer that it passed,

¹ Hist. Nat., ii. 12.

² Solinus, cap. xv. p. 25.

³ Diodorus, L. xx. p. 735.

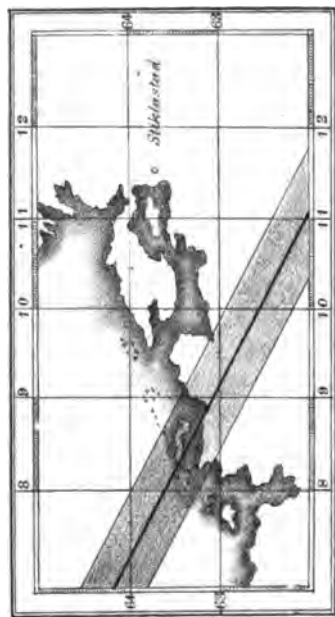
² Clem. Alex. Strom. 8.

⁴ Athenæum, Aug. 1852.

⁶ Justin. Hist., L. xxii. c. v.

⁷ Mr. Airy's paper, Phil. Trans., 1853.

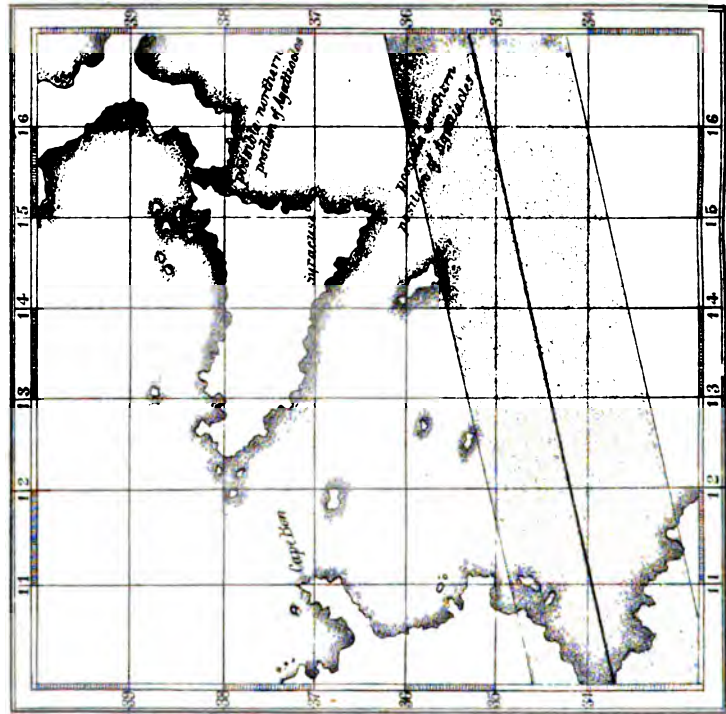
ECLIPSE AT STIKLASTAD A.D. 1030.



Copied from Mr. Airys Maps, and calculated according to Hansens tables

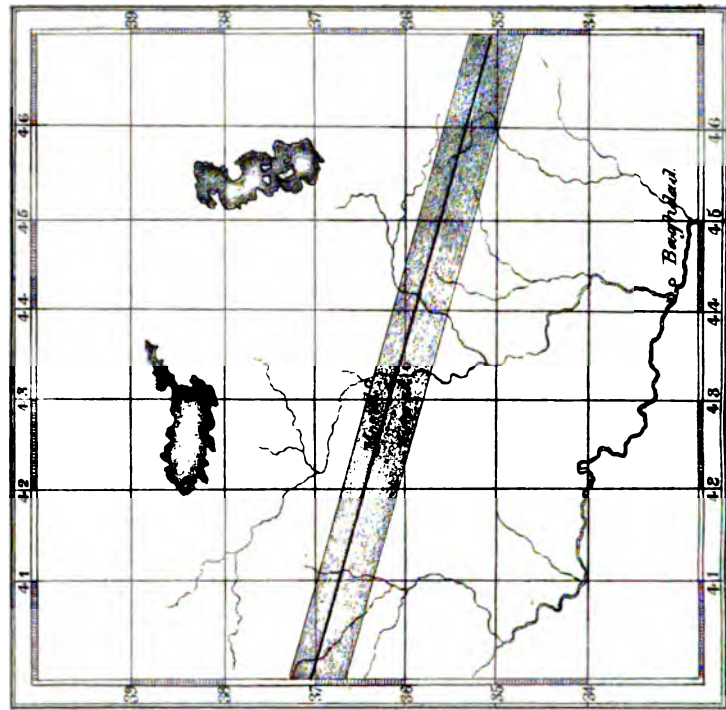


ECLIPSE OF AGATHOCLES B. C. 310.



From Hansen's tables.

ECLIPSE AT LARISSA B. C. 557.



Copied from Mr. Airys Maps, and calculated according to Hansen's tables.

—viz., through Ionia, and therefore through the centre of Asia Minor, and on the direct road leading from Lydia to Media, also throws the shadow of the moon in the time of Agathocles not far from Syracuse, where we are certain from history that it must have passed. Such is the nature of the proof, the details of which may be seen in Mr. Airy's valuable paper in the Philosophical Transactions of 1853, that the historical date B.C. 585, or 4th year of the 48th Olympiad, is the true date of this eclipse¹; and with the registered motions of the moon for upwards of one hundred years, before him, at Greenwich Observatory, and with a practical knowledge therefore of the laws which regulate her motions, he has "expressed his opinion, that the date B.C. 585 is now established for the eclipse of Thales beyond the possibility of doubt²." The new Lunar and Solar Tables of the German astronomer Hansen, published last year by our Board of Admiralty, lead to the same result, as set forth in the accompanying maps: since which, Mr. Airy has published another paper in the Memoirs of the Royal Astronomical Society of 1857, testing his former conclusions with regard to the eclipse of Thales, by the eclipse of Larissa in B.C. 557, and the eclipse of Stiklastad³ in A.D. 1030, and substantially confirming them. Thus the date of the eclipse now scientifically fixed by the best astronomical authorities, coincides with the date handed down by tradition: and it would seem to be a mark of extreme hardihood to deny the result of this concurrent testimony. Nevertheless, some are still found warmly contending against it, feeling that the current chronology of the period is shaken to the foundation by this decision.

Thales is said to have predicted a good olive crop, and Anaxagoras to have foretold the fall of an aerolite. In a note, with the initials H. C. R., to Rawlinson's Herodotus, it is observed: "The prediction of this eclipse by Thales may fairly be classed with the prediction of

¹ See also Mr. Hind's Letter to the Athenæum, 28th August, 1852.

² Lecture at the Royal Institution, Feb. 1853.

³ A translation of Professor Hansteen's paper on the Eclipse of Stiklastad will be found in the Transactions of the Chronological Institute, vol. i. p. 209. It is clear, from the account of the battle fought near Stiklastad during this eclipse, that the line of shadow must have passed farther north than would appear from Hansen's Tables. It is also clear, that the shadow in the time of Agathocles must have passed much further north than the Tables place it, from these words of Justin: "*Nulla militum scientie quo veheretur, cursum in Africam dirigit; cum omnes aut in Italiam prædatum se, aut in Sardiniam ituros crederent.*" The correction of the position of these two shadows would have the effect of throwing the shadow in B.C. 585 much farther north in Asia Minor, so as to bring it upon the road leading from Sardis to Susa, so fully described by Herodotus, L. v. 52; for the shadows of the three eclipses are all affected in the same direction, being all at the ascending node.

a good olive crop, or of the fall of an aerolite¹. Thales, indeed, could only have obtained the requisite knowledge for predicting eclipses from the Chaldæans; and that the science of these astronomers, although sufficient for the investigation of lunar eclipses, did not enable them to calculate solar eclipses—dependent as such a calculation is, not only on the determination of the period of recurrence, but on the true projection also of the track of the sun's shadow along a particular line over the surface of the earth—may be inferred, from our finding that in the astronomical canon of Ptolemy, which was compiled from the Chaldæan registers, the observations of the moon's eclipse are alone entered². In reply to these observations, I quote the words of Mr. Airy³: "I think it not at all improbable that the eclipse was so predicted: and there is one easy way, and only one, of predicting it—namely, by the *saros*, or period of 18 years, 10 days, 8 hours nearly. By use of this period, an evening eclipse may be predicted from a morning eclipse; but a morning eclipse can rarely be predicted from an evening eclipse (as the interval of eight hours after an evening eclipse will generally throw the eclipse at the end of the *saros* into the hours of night). The evening eclipse, therefore," of B.C. 585, May 28, "which I adopt as being *most certainly the eclipse of Thales*, might be predicted from the morning eclipse" of B.C. 603, May 17. . . . "No other of the eclipses discussed by Bailly and Oltmanns present the same facility for prediction." Sir Henry Rawlinson has correctly stated the difficulty in those days of projecting on a map the true line of any coming eclipse; but the peculiar facility, without need of any such scientific projection, of anticipating that an eclipse would be visible in Ionia, on the 28th May, B.C. 585, from the fact of a large partial eclipse having occurred there on the 17th May, B.C. 603, again confirms the decision, that it was that, and no other eclipse, which Thales could have led the Ionians to expect.

Considering, then, that according to our ablest astronomers the eclipse of B.C. 585 is the only one which could have been total on the line between Media and Lydia during fifty years from B.C. 630 to 580—that all ancient tradition affixes the date B.C. 585 to the battle between the Medes and Lydians—and that the solar eclipse in that year is the only one which could have been foretold by any astronomer

¹ A recent writer in the *Journal of Sacred Literature*, in a studied article on the date of the fall of Nineveh, suggests, that it was merely "a sudden thunder storm of unusual gloom and violence," which terrified the two armies.—J. S. L., April 1858, p. 161.

² Rawlinson's *Herodotus*, vol. i. p. 212.

³ *Proceedings of the Royal Astronomical Society*, vol. xviii. p. 148.

of that early time, I assume it to be a fact established for ever, that the battle between the Lydians and Medes was fought in the year B.C. 585, and that Cyaxares, king of Media, was in that year in the full vigour of his power. This one fact, however, is subversive of the whole scheme of Median and Persian chronology adopted by the authors to whom I have before alluded, who all place the death of Cyaxares in or about the year B.C. 595, ten years before the battle could have been fought; whereas it is clear, from Herodotus, that he must have lived several years after that event.

Another remarkable event connected with the reign of Cyaxares, from which we are enabled to define still more closely the time of his reign, is the final destruction of Nineveh and the Assyrian empire by the Medes under his command. The destruction of Nineveh is the last event in the reign of Cyaxares mentioned by Herodotus, and appears therefore to have happened after the conclusion of the Lydian war in B.C. 585. The Lydian war, he tells us, had been carried on by the king of Media, in the time of Labynetus, or Nabopalassar, ruler of Babylon, and somewhere within those twenty-eight years when the Scythians held supreme power throughout all Asia. From which we may infer, that Labynetus was then merely local or tributary ruler of Babylon under the Scythians¹. In the meanwhile, Cyaxares having grown powerful in Media, prepared to shake off the yoke of the Scythians. He had strengthened himself already by the marriage of his son, Astyages, to the daughter of the king of Lydia in B.C. 585. He now, as we learn from Abydenus², formed another alliance, by marrying his daughter, Anuheia, to Nebuchadnezzar, son of Nabopalassar, or Labynetus, ruler of Babylon, who was acting as general of the armies of the king of Nineveh.

The Babylonians, probably headed by Nebuchadnezzar, and the Medes under Cyaxares (the Nebuchadonosor and Ahasuerus of the book of Tobit), now besieged Nineveh, which fell after a long siege, Saracus, king of Nineveh, (Assaracus, Assarac, or Assarac-bal, son of Esarhaddon,) who had probably been set upon that throne by the Scythians, on the expulsion of Nabopalassar the usurper, perishing in

¹ Herodotus does not speak of him as king of Babylon, but as *Λαδύνητος* 'ο *Βαβυλωνίος*, L. i. 74.

² Euseb. Chron. Arm. Aucher., Part 1, p. 27. Abydenus here speaks of the daughter of Astyages, not of Cyaxares, having married Nebuchadnezzar. But he has probably written Astyages, for Astibares, who was Cyaxares, as we may infer from a fragment of Eupolemus (Muller's Frag., vol. iii. p. 229), who records an expedition of Nebuchadnezzar and Astibares against Syria and Judaea. The same error may have led Cicero and Solinus to have placed the eclipse of Thales in the reign of Astyages, which is clearly incorrect.

the flames. If we allow three years for preparations and for the siege of that great city, after the termination of the Lydian war, we shall arrive at the year B.C. 581 as the date of the final destruction of Nineveh, in which year I am disposed to place the event. But if Cyaxares was living in the year B.C. 581, and reigned only forty years, he could not have come to the throne earlier than the year B.C. 620; and his father, Phraortes, who, we are told, was slain in battle by a king of Nineveh, could not have died earlier than about the same year.

Who, then, was king of Nineveh in the year B.C. 620, who slew Phraortes? Undoubtedly Nabopalassar was then king of Babylon, as fixed by an eclipse registered at Babylon in his 5th year, in the 127th year of the æra of Nabonassar, or B.C. 621: and I have before shown, from the Chaldean historians, that Nabupalsar, or Nabopalassar, was also king of Nineveh as well as Babylon¹. Phraortes, therefore, was slain by this king. This fact, thus ascertained, enables us to fix the precise year of the death of Phraortes, and of the accession of Cyaxares, with a great degree of certainty. For Phraortes, king of Media, is the same as Arphaxad, king of Media, of the book of Judith, who, according to the Vulgate edition of that book, was slain in the twelfth year of the king of Nineveh. Now, the twelfth year of the reign of Nabopalassar over Nineveh and Babylon was B.C. 614. Phraortes, therefore, was slain in that year, and Cyaxares came to the throne of the Medes in the year B.C. 613.

We thus obtain the dates of the accession of each of the four kings of Media as follows:—

Deioces	53 years from B.C. 688
Phraortes	22 " 635
Cyaxares	40 " 613
Astyages	35 " 573 to 539

Thus, the first year of the revolt of the Medes under Deioces fell in the year B.C. 688, and the death of Astyages in the year B.C. 539. This arrangement of Median chronology is strongly confirmed by the fact, that it clears up one of the greatest perplexities in the account which Herodotus gives of these times². Herodotus, as we have seen, counts 150 years from the first of Deioces to the last of Astyages. But when he comes to speak of the conquest of Astyages by Cyrus, he writes: "The Medes thus lost the sovereignty of Asia, which they had held for 128 years, excepting only the time of the Scythian dominion." Now, 128 years and 150 years, calculated from the same point, cannot both end in the last year of Astyages. The explanation of the

¹ Journ. R. A. S., vol. xv. part 2, p. 420.

² See a paper on this subject in the Trans. of Chron. Inst., vol. i. p. 131.

difficulty is here perfectly simple. For Astyages was conquered, as all ancient authorities agree, about the 55th Olympiad=B.C. 560. Add 128 years to 560. and we come to the year B.C. 688, as the first year of the dominion of the Medes; and counting 150 years downwards from that date, we come to the year B.C. 539, for the last of Astyages.

But it may be asked, what authority is there for supposing that the ancients placed the last year of Astyages so low as the year B.C. 539? A reference to the Canon of Ptolemy will satisfy us that this was a very early arrangement of the years of that king. It has been before observed, that there are three versions of what is called the Canon of Ptolemy¹, each differing from the other, being, as I conceive, three different attempts to reconcile the then recognized chronology of the kings of Media and Persia, with the fixed and unfixed reigns of the kings of Babylon. In two of these copies, as stated below², we observe that Nabonadius, the last king of Babylon, is identified with Astyages; and the last year of his reign is placed in B.C. 539. And one of the copies even assigns thirty-four years as the length of the king's reign, which we know to be the length, within a year, of the reign of Astyages—not of Nabonadius, who only reigned seventeen years. The years of the reign begin in B.C. 572, and end in B.C. 539, in accordance with the dates already ascertained.

We know, indeed, that the identification of Astyages with Nabonadius is incorrect. Nevertheless, the evidence of these two early documents remains, in proof that the compilers considered the reign of Astyages to have ended in the year B.C. 539. My own conviction also is, that the third copy of the Canon was framed upon the same principle. For the list of kings in this copy, ending with Nabonadius, is headed "Assyrian and Median" kings³, as distinguished

¹ See Jour. R. A. S., vol. xv. part 2, p. 428.

² Astronomical Canon.			Ecclesiastical Canon.			Canon of Ptolemy, according to Theon.		
B.C.		Yrs.	B.C.		Yrs.	B.C.		Yrs.
623	Nabopalassar, who is Nabuchodonosor	43	606	Nabuchodonosor	43	604	Nobocolassar	43
580	Illoarudamus	3	563	Ebidan Merodac	5	561	Ilvarodamus	2
577	Nerigasolassar	5	558	Nereglasar, who is Belshazzar	3	559	Nerecassolassar	4
572	Nabonadius, to who is	34	555	Nabonadius, to who is	17	555	} Nabonadius	17
539	Astyages		539	Astyages		539		
538	Cyrus	9	538	Cyrus	31	538	Cyrus	9

³ Petavius. Rat. Temp., vol. ii. p. 916.

from the Persian kings who follow. Unless, therefore, Nabonadius was supposed to be Astyages, there would be no single Mede in the list.

Such is the well-defined outline of Median chronology, from Deioeces to Astyages, as deduced from Herodotus, and as I believe it to have been understood in ancient times; which alone also is consistent with the fundamental date B.C. 585, which no ancient authority ever doubted was the date of the eclipse of Thales.

Let us, then, arrange this Median chronology side by side with the chronology of the kings of Lydia, Babylon, Nineveh, and Judæa, and mark the results :—

B.C.	Judæa.	Nineveh.	Babylon.	Lydia.	Media.
704	....	....	....	Gyges	
702	....	....	Belibus		
701	Hezekiah				
699	....	....	Apronadius		
692	....	....	Mesessimordac		
689-8	14 Hezekiah	3 Sennacherib ....	....	....	Deioeces
680	....	....	Asaradinus, viceroy of Sennacherib		
672	Manasseh				
667	....	Esarhaddon	= Sacesduchinus, or Sarchedon		
666	....	....	....	Ardys	
647	....	....	Kiniladinus		
635	....	....	....	....	Phraortes, or Arphaxad
625	....	Nabupalsar, or Sar-nabupal ¹ , or Sardanapalus, usurper	= Nabopalassar		
617	Amon	....	....	Sadyattes	
616	Josiah	....	....	....
613	....	....	....	....	Cyaxares, or Ahasuerus I.
606	....	....	INVASION OF THE SCYTHIANS		
606	....	Saracus, or Asa- rac-bal, son of Esarhaddon, set on the throne by the Scythians	Nabopalassar, governor un- der the Scy- thians for 28 years		
605	....	....	....	Alyattes	
585	....	....	ECLIPSE OF THALES		
584	Jehohabaz				
583	Jehoiakim				
581	....	Saracus burns himself in his palace	FALL OF NINEVEH		

¹ This transposition of compound titles is very common in the Hebrew Scriptures. For instance: "Eli-am" for "Ammi-el," "Ahaz-iah" for "Jeho-ahaz," "Asah-el" for "El-asah," "Eli-shama" for "Iahma-el."—See Lord A. Hervey on the Genealogies, p. 116.

B.C.	Judæa.	Babylon.	Lydia.	Media.	Persia.
580		Nebuchadnezzar	EXPULSION OF THE SCYTHIANS		
573	Jechoniah	....	....	Astyages	
572	Zedekiah				
562	11 Zedekiah = 19 Nebuchadnezzar = 44 Alyattes				
559	Seventy years' desolation of Jerusalem, ending in the 1st year of Darius, son of Ahasuerus.—Dan. ix. 1, 2.	....	....		Cyrus, father of Cambyses
548		....	Croesus		
538		....	....	Cyaxares II., or Ahasuerus, husband of Esther	
537		....	....	....	Cambyses, son of Cyrus, husband of Mandane
536		45 Nebuchadnezzar = 12 Croesus = 3 Cyaxares = 2 Cambyses			
535		Evilmerodac			
533		Nereglissar			
530		FALL OF BABYLON		9 Cyaxares = 8 Cambyses	
529		Nabonadius, viceroy under Cambyses	....	....	1 Cambyses as King of Babylon
523	....	....	....	....	Cyrus, son of Cambyses
521	....	....	....	Darius, adopted son of Ahasuerus, son of Hystaspes	
513	Cyrus, son of Cambyses, deposes Nebonadius				
493	Darius, son of Ahasuerus, takes the kingdom, being about 62 years of age				

The chronology of each of these separate lists of kings rests upon its own independent foundation, the proofs of which are elsewhere given¹, but into which we shall not now enter. I will merely say a few words explanatory of the grounds upon which the important reign of Nebuchadnezzar, king of Babylon, is fixed to the forty-five years running from B.C. 580 to 536. According to Berossus, this king reigned forty-three years. According to the Hebrew Scriptures, he reigned forty-five years. This discrepancy is explained by the fact, that he took command of his father's armies about two years before his father's death². His first year in Scripture is counted from his association with his father in B.C. 580, after the capture of Nineveh. The first year of his sole reign is counted from B.C. 578. The dates are thus ascertained:—

I. Nebuchadnezzar began to reign after the eclipse of B.C. 585;

¹ Trans. Chron. Inst., vol. i. pp. 63, 113, 131, 194, 270.

² Josephus, *Con.*, Ap. i.

because Abydenus¹, copying from Chaldean sources, and writing in the early age of the successors of Alexander, tells us that he began to reign soon after the fall of Nineveh, which event we have already fixed at about the year B.C. 581, four years after the eclipse. His first year, therefore, could not be earlier than B.C. 580.

II. Demetrius², a Hellenistic Jew, writing in the time of Ptolemy Philopator, states, that the Jews were carried captive to Babylon, by Nebuchadnezzar, 338 years and 3 months before the reign of Philopator, who came to the throne in November, B.C. 222,—thus making the nineteenth year of Nebuchadnezzar, or year of the Captivity, B.C. 560, and his first year, therefore, B.C. 578. Demetrius, however, thus places the Captivity in the nineteenth year of the sole reign of Nebuchadnezzar, instead of in the nineteenth from association with his father.

III. St. Matthew counts fourteen generations from the captivity of the Jews (in the nineteenth year of Nebuchadnezzar) to the birth of Christ. These generations are not generations in the ordinary sense, from father to son, because we know from St. Luke that there were no less than twenty-two generations in that period³. They are generations in the sense spoken of by Herodotus, when he counts five generations from Semiramis to Nitocris, and explains elsewhere that three generations were counted to one hundred years⁴. The Jews appear to have calculated differently. With them forty years was counted for a generation. Placing, therefore, the birth of Christ in the year B.C. 3, we have $40 \times 14 = 560 + 2 = \text{B.C. } 562$ for the nineteenth year of Nebuchadnezzar, and B.C. 580 for the first year of his reign.

IV. The Chaldean historians compute eighty-eight years from Sennacherib to Nebuchadnezzar. I have before shown that the first year of Sennacherib = 36th year of Ilulæus, was B.C. 690 or 691, and that he ceased to reign about the year B.C. 668. Counting, therefore, eighty-eight years from his death, we come to the year B.C. 580 for the first year of Nebuchadnezzar.

Let us now return to the list of the kings of Media. With the death of Astyages, who is said to have left no male heir, Herodotus terminates abruptly the empire of the Medes; and from thenceforth considers that the Persians, under Cyrus, the father of Cambyses, king of Persia, became supreme and sole governors of the Medo-Persian empire. In this conclusion there can be little doubt that Herodotus was incorrect. This accomplished Greek, travelling as a stranger through Persia, has selected from the various traditions

¹ Euseb. Chron. Arm., p. 27.

³ Trans. Chron. Inst., vol. i. p. 63.

² Clem. Alex. Strom., i.

⁴ Herod., i. 184; i. 142.

current amongst the Persians in his day, what he conceived to be the true history of the rise of the Persian empire under Cyrus. But he admits at the same time, that other histories of Cyrus were then extant. Another equally accomplished Greek of a later date has thought it necessary to correct his statements. Xenophon, who had mixed with Persians of the highest rank of his day, and had made careful inquiries of them with a view to his History of Cyrus, has handed down to us a widely different statement, and has given a lively history of the political state of Media and Persia after the death of Astyages. He shows us that, while Media and Persia were bound together in close confederacy, and by family alliances, after the death of Astyages, each of those kingdoms still retained its own independent prince. He tells us that Astyages had a son, who was heir to his dominions; and that during the reign of that son over such portion of his dominions as remained unsubdued by the Assyrians, Cambyses was also reigning in Persia, and that Cyrus, his son, had not yet come to the throne. Now, one or other of these two histories is certainly untrue. If Cyrus, who conquered Babylon, was at the time sole monarch over all Asia, Cambyses and Cyaxares could not have been reigning independently in Persia and Media when Babylon was taken by Cyrus, son of Cambyses.

Fortunately we are enabled to adjudicate between these two historians, on the evidence of a contemporary witness of the highest character. At the very time we are speaking of, that is both before and after the taking of Babylon, there was living an eunuch of high rank and of transcendent abilities, who had held office under the kings of Babylon, and who, after Babylon was taken, was equally distinguished in the Court of Persia. The Jewish captive, Daniel, himself of royal extraction, had raised himself to the highest positions in the State; he must have been perfectly acquainted with the persons and politics of the reigning princes of his day; and no one was so competent to write a correct account of the state of the Medes and Persians about the time of the taking of Babylon. Now, although Daniel has not undertaken to record the annals of the Medes and Persians, he has left us incidentally, in a few words, so perfect a picture of the political relations of those kingdoms at that time, as to enable us to decide between the conflicting accounts of Herodotus and Xenophon, and to pronounce, without fear of error, which of the two has approached the nearest to the truth. He pictures the Medo-Persian empire, just before the taking of Babylon, under the symbol of a ram with two horns¹; and these two horns, he tells us, represent the two kings, or

¹ Dan. viii. 20.

kingdoms, of Media and Persia. Nothing can be more distinct and decisive than this image, if Daniel had not written another word. He adds, however—while placing Media as the predominant kingdom at the time of the fall of Babylon, that the horn, or kingdom, which rose last—viz., Persia, should afterwards become the prevailing power—and this twofold, yet united empire, he describes as extending itself westward, and northward, and southward, from Susa, on the river Ulai, in the province of Elam. Thus the kingdoms of Media and Persia, in the days of Daniel, were united into one sovereign head; neither of the two was looked upon as subject to the other, but both combined to form one federal State, and so remained for a while, after Susa had become a principal seat of government. In conformity with this symbol of federal union and equality, we read, therefore, in the book of Esther¹, written after the fall of Babylon, of the “*power of Persia and Media*,” as distinguished from “the nobles and princes of the provinces,” and also of the “book of the chronicles of the kings of Media and Persia.” The Behistun inscription², almost in the same words as Esther, speaks frequently of “*Persia and Media*, and the dependent provinces;” and Daniel refers to the “*laws of the Medes and Persians*,” and declares that the kingdom of Babylon shall be “*divided and given to the Medes and Persians*.” The contemporary evidence of Daniel, therefore, establishes the accuracy of Xenophon, as regards the independence and political equality of Media and Persia at the time of the taking of Babylon, and also as regards the titular precedence of Media up to that time as the superior power; and as decidedly sets aside the opinion of Herodotus, that Media had then become a subject province of the full-grown Persian empire. The kingdom of Media did not cease to exist with Astyages; but some Median prince, we infer, must have inherited the throne of that king. When Xenophon, therefore, affirms that Cyaxares, son of Astyages, was that prince, there is the strongest reason for believing that he has stated the truth, and that a fifth Median king really reigned. I assume it then to be a fact, that Cyaxares II. succeeded his father Astyages in Media.

Xenophon has been very particular in his account of the war with Babylon, and of the taking of that city by the Medes and Persians in the reign of Cyaxares II., and his account is found to be in remarkable agreement with what we collect from the Hebrew Scriptures; but having affixed no dates to his history, we are unable to collect from

¹ Esther, i. 2; x. 2.

² Journal of the Royal Asiatic Society, vol. x. p. xviii.

³ Dan. v. 29.

the narrative how long Cyaxares II. remained on the throne. All we know is, that if his father Astyages ceased to reign in B.C. 539, Cyaxares must have begun to reign in B.C. 538. There is yet another historian of these times, however, to be consulted, who relieves us from this difficulty. For at this point an interesting historical combination arises out of the new arrangement of dates before us, leading to the fact that Cyaxares must have reigned many years.

While Xenophon has preserved the history of this second Median king bearing the title Cyaxares, a Hebrew writer—some say Jehoiakim, son of Joshua the high priest—has preserved the record of a second king, bearing, in the Hebrew language, the title Ahasuerus, the first of that title having been king of Media. Now, there can be little doubt that Ahasuerus and Cyaxares are one and the same title, for several cogent reasons:—

I. Because Nineveh was conquered, according to Herodotus, by Cyaxares I.; and the Median king who conquered Nineveh, according to the book of Tobit, was called by the Hebrews Ahasuerus.

II. Because the Hebrew title **אַחַשְׁוֶרֶשׁ**, without the vowel points, is "Achshurush" or "Achsurus," which, allowing for the difference of languages, is the same as the Greek title *Açapes*, or "Axares," and the Median title "Vakstarra"¹, as given in the Median transcript of the Behistun inscriptions, which represents Cyaxares. The first syllable "Cy," in Cyaxares, we know, is merely an affix signifying "king," as in the instances Ké-Cobab, Ké-Caus, Ké-Khosru, Ké-Lhorasp, Ké-Gushtasp, in the Zendavesta².

III. Because, if not Cyaxares, Ahasuerus II. must represent either Artaxerxes, or Xerxes, as many still contend. But the Hebrews could not have written **אַחַשְׁוֶרֶשׁ**, or "Achshurush," for either of the two latter titles; because we know that they wrote **אַרְתַּחְשֶׁשְׁתָּא**, or "Artakshastha," for "Artaxerxes," and would therefore, we may assume, have written **חֲשֶׁשְׁתָּא**, or "Kshastha," for "Xerxes." Moreover, the title "Xerxes," as found on contemporary monuments, was written "Khshayarsha," as in the Persian transcript of the Behistun inscription, and "Khshaarsha," or "Khshirsha," in the Hieroglyphic, without the distinguishing character "Ach" in the beginning, which is found in *Açapes*, Achshurush, and Vakstarra.

Cyaxares II. of Xenophon, therefore, is Ahasuerus II. of the book of Esther; and it immediately follows, from this identification, that Cyaxares, fifth king of Media, reigned not less than fourteen years;

¹ Journal of the Royal Asiatic Society, vol. xv. part 1, p. 125.

² Zend, vol. ii. p. 422.

and that, if he came to the throne in B.C. 538, he must still have been reigning in the year B.C. 525, when Cambyses was on the throne of Persia.

The reign of Ahasuerus has been so shifted from place to place by interpreters of sacred history, owing to the difficulty of arranging it in harmony with the common chronology, and the title has been identified with so many different Median and Persian kings, that some have been led to doubt whether the book of Esther, which contains his history, is not altogether fiction. But if the title is really—as I am satisfied it is—the same as Cyaxares, it occurs exactly in the periods where we should expect to find it, and should be found to represent those two kings of Media only who bore that title, and no other kings whatsoever. When it is proposed to identify Ahasuerus, as in the common chronology, first with Cyaxares, then with Astyages, then with Cambyses, and again with Xerxes or Artaxerxes, we may well reject such suggestions as absurd and impossible. It is only to be wondered at that such a series of misidentifications should have passed current up to the present time as the true exposition of this part of sacred history. To accept such a string of contradictions, is to assume that the Jews, who, throughout the period of their captivity, were in frequent contact and favour with the princes under whom they served, and who wrote their histories while those princes were living, were either ignorant of their real titles, or that they have wilfully and systematically misrepresented them. Such an idea is inconceivable of any people, much less of the Jews.

I have observed that the title and reign of Ahasuerus when identified with the title and reign of Cyaxares, fall in the periods where we expect to find them. The events of the book of Esther must have taken place within fifty years after the eighth year of Nebuchadnezzar, when Jechoniah was carried captive to Babylon; because Mordecai¹, one of the chief actors in the scenes described in that book, was carried captive with Jechoniah, that is to say, as already ascertained, in the year B.C. 573. The first year of Cyaxares, or Ahasuerus=B.C. 538, which is thirty-five years later than the date of Jechoniah's captivity, well agrees therefore in point of time. As Ahasuerus I., who destroyed Nineveh, falls in with the reign of Cyaxares I., who destroyed Nineveh; so Ahasuerus II. of the book of Esther necessarily falls in with the reign of Cyaxares II., in whose reign Babylon was taken by Cyrus. The reign of this king thus loses all its vagueness and uncertainty of position and character; its limits become fixed between the

¹ Esther, ch. ii. 5, 6.

years B.C. 538 and some year later than B.C. 525 ; and two historians, one a Greek, the other a Hebrew, are found, when compared together, to have noted the events of all but the few last years of his reign, each taking up the history when dropped by the other, and each portraying his character with remarkable consistency, as a weak, hasty, capricious, self-indulgent, and luxurious prince in all his ways.

It is from Xenophon only that we learn anything concerning the two first years of this king's reign. On the death of Astyages¹ in Media, he tells us that Cyaxares, brother to the mother of Cyrus, took the throne ; that the reigning king of Assyria and Babylon was then he who had conquered the Syrians, the Arabians, and Hyrcanians, and was about to invade Bactria, a portion of the Median dominions, who could be no other than Nebuchadnezzar², under whom the kingdom of Babylon reached its fullest extent ; that Crœsus was the ally of this king of Babylon in the proposed invasion, which we know from Herodotus took place about three years before his fall ; that Abradates was at the time king of Susa, an ally of the king of Babylon, and probably a tributary king ; and that, when the war broke out, Cambyses, husband of Mandane, was on the throne of Persia, and Cyrus, his son, not yet a king. Accordingly we find in the table of chronology before us, that the year B.C. 537, or second year of Cyaxares, was the last year but one of the reign of Nebuchadnezzar ; that B.C. 537 was the last year but two of the reign of Crœsus ; and, from one of the very few dates fixed by Herodotus, we know that Cambyses had, in the same year B.C. 537, just taken the reigns of government in Persia ; for he tells us, that it was in the year that Darius, the son of Hystaspes, entered his twentieth year, that Cyrus his father placed him on the throne, that is to say, in B.C. 537³.

I will now establish beyond doubt, from a passage in Megasthenes, that such must have been the exact relative position of the several reigns of Cyaxares, Crœsus, Cyrus, and Nebuchadnezzar, at the time of the death of the latter king. Megasthenes thus writes : " It is related by the Chaldeans, that as he (Nebuchadnezzar) went up upon

¹ Xenophon, v. 2.

² Herodotus affirms, that it was against Labynetus, son of Labynetus and Nitocris who were living at the time of the eclipse in B.C. 585, that Cyrus made war, i.e., against Nebuchadnezzar, son of Nabopolassar, which latter was living till the destruction of Nineveh after the eclipse.—L. i., 188 and 74.

³ Darius had entered his seventy-second year, in the year B.C. 485, when he died, according to Ctesias. He had entered, therefore, his twenty-second in B.C. 535, and his twentieth in B.C. 537. Herodotus, in the confusion of his chronology, places on the throne of Persia, Cambyses, grandson of this Cambyses, instead of Cambyses, son of Cyrus, who married Mandane.

his palace, he was possessed by some god ; and he cried out, ‘ Oh ! Babylonians, I, Nebuchadnezzar, foretell unto you a calamity which must *shortly* come to pass, which neither Belus, my ancestor, nor his queen, Beltis, have power to persuade the Fates to avert. A *Persian mule* shall come, and by the assistance of your gods, shall impose upon you the yoke of slavery, the author of which shall be a *Mede*, the vain glory of Assyria,’ &c., when he thus prophesied, he expired¹.”

Now we know from Herodotus, that about three years before the fall of Crœsus, that king had consulted the oracle at Delphi concerning his prospect of success in the event of his invading the Persian empire. The response of the oracle was, that when a *mule* should rule over the Medes, then might Crœsus expect to be put to flight. Crœsus, as we have seen, was the ally of Nebuchadnezzar ; and though Megasthenes does not name Crœsus, who can doubt that these last words of the king of Babylon, concerning the coming of a Persian mule, refer to the response of the Delphic oracle which had been communicated to him by Crœsus. The Lydian king, in his eagerness to overthrow the Persians, had interpreted the oracle as favourable to his expedition. The old Babylonian king, more wary, had probably referred the interpretation to the Chaldee magicians and astrologers at Babylon, as we know he had formerly done on the occasion of his own two portentous dreams. Over these magicians, we are informed, that Daniel then presided²; and from such a source he would doubtless learn that evil had long since been decreed against Babylon, and that the evil foretold was to be inflicted upon his country by the hands of the Medes. Nebuchadnezzar was thus enabled to utter, without hesitation, these remarkable words preserved by Megasthenes concerning the fate of his kingdom. Cyrus, son of Mandane the Mede, and also of Cambyzes the Persian, was undoubtedly the mule here referred to ; and Cyaxares, or Ahasuerus, who, as brother-in-law of Nebuchadnezzar, ought to have been the glory and support of his kingdom, was the Mede, the vain glory of Assyria. Thus we collect by implication from Megasthenes, in corroboration of Xenophon, and also of our arrangement of dates, that it was in the last year of Nebuchadnezzar that the young prince Cyrus was beginning to rise into notice ; that Crœsus was approaching towards the close of his reign ; and that Cyaxares, king of Media, was raising that confederacy against Babylon which ended in its downfall. Let us here step out of our way for one moment to observe, how efficient an answer is thus afforded to the Chevalier Bunsen³ and other writers, who have

¹ Euseb. Præp. Evan., l. 10.

² Dan., iv. 9.

³ Philoa. of Universal History, vol. i. p. 217.

attempted to throw doubt on the authority of the book of Daniel, on the ground of the occurrence of Greek appellations for musical instruments in that book, which they affirm could not have been in use so early as the reign of Nebuchadnezzar. For, if that king could have received, either directly or indirectly, a communication from the Greek oracle at Delphi, where can be the difficulty in believing that the Greek *κιθαρís*, *σαμβύκη*, *συμφωνία*, and *ψαλτήριον*, together with the names of those instruments, may have reached Babylon in the reign of Nebuchadnezzar? Far more difficulty is there in admitting the correctness of the chronology adopted by these writers, which supposes that Nebuchadnezzar died in the year B.C. 561, and that Crœsus ceased to reign in B.C. 548, by which it would appear that Crœsus received the response concerning the mule in Persia long after the utterance of these words concerning Cyrus, the mule, by Nebuchadnezzar.

Such, then, was the position of the kingdom of the Medes during the two first years of the reign of Cyaxares, or Ahasuerus. A confederacy had been formed between Media and Persia against Babylon; the war had commenced soon after the accession of Cyaxares in B.C. 537 or 536; Media was, as Daniel and Xenophon attest, still nominally in the ascendant, while we cannot but infer that the warlike Persians under Cyrus must *de facto* have been gaining the predominance over the Medes from day to day. It must have been during the few following years of continued conquest, that the horn of Persia became exalted over that of Media, and that the whole northern and western provinces of Asia became subject to the Persians.

We now turn to the book of Esther, which opens with an account of a magnificent banquet given by Ahasuerus, on setting up his throne at Susa, in his third year, B.C. 536, "when," as it is there expressed, "he sat on the throne of his kingdom which was at Shushan." This movement of the court and seat of government of Ahasuerus to Susa would appear to have been the first result of the successful operations of the opening campaign, when Armenia, and probably the province of Elam, were wrested from the hands of the Babylonians. A new partition of the empire now became necessary, owing to the rapid acquisition of large provinces; and it was literally soon after this time that the kingdom of Babylon began to be *divided*, according to the words of Daniel, between the Medes and Persians. To the unwarlike Cyaxares and the more polished Medes were now assigned the one hundred and twenty-seven comparatively peaceful provinces, reaching from India to Ethiopia, with Susa as the capital, that is to say, the whole of the eastern and southern provinces (for the Ethiopia here spoken of was, I assume, Asiatic, not African Ethiopia), while Cyrus and his father

Cambyases would naturally have seated themselves in the more northern provinces, with a view to military operations in Babylonia and Asia Minor. Consistently with this partition of territories, which rests primarily on the authority of Daniel, we learn from Herodotus the fact, that Cambyases, who came into power in B.C. 537, placed the seat of his government at Ecbatana—Xenophon records the fact, that the province of Media was, soon after the fall of Babylon, ceded by Cyaxares to Cyrus as a dowry with his daughter, which seems to imply that this province was not then immediately under his special government—and from the book of Ezra we know, that Cyrus issued his decree for the rebuilding of the Temple from Acmetha in the province of the Medes¹.

In this same third year of Ahasuerus, Vashti, his queen, was repudiated and deposed; and command was given to seek for a queen amongst the fairest virgins throughout the king's dominions. From which incident, though related by the Hebrew historian merely with reference to the exaltation of a Jewess to the throne, we may perhaps trace the anxiety of Ahasuerus for male issue to succeed him, and a corroboration of the fact mentioned by Xenophon, that he had no male heir; for had such been the case, he would hardly have repudiated so hastily the mother of the future reigning prince. The book of Esther now drops the history of Ahasuerus till his seventh year; and we again refer to Xenophon, from whom we collect that Cyaxares was probably engaged with the army during the following campaigns with his nephew Cyrus. In the fifth year of his reign he appears to have been present when a pitched battle was fought with the Babylonians, in which the Babylonian king, who, together with Croesus, headed the army, was slain. This Babylonian king could have been no other than Evilmerodach², son of Nebuchadnezzar, who reigned only two years, and died in the year B.C. 534=5th of Cyaxares. In the next battle described by Xenophon, that is to say, in the following year, B.C. 533, when another Babylonian king (Nereglissar³) had come to the throne, and when Abradates, ex-king of Susa, was slain⁴, Cyaxares was not present. Nor was he present at the taking of Sardis in the same campaign⁵. He had quitted the field and returned to his own dominions⁶. He was full of jealousy, as Xenophon relates, at the superior talents exhibited by his nephew Cyrus, and at the greater deference consequently shown by the army to that young

¹ Ezra, vi. 2.

² Compare Xenophon III., ch. iii. 43, and IV., ch. i. 8.

³ Xenophon IV., ch. vi. 3.

⁴ Ibid. VII., ch. i. 32.

⁵ Ibid. VII., ch. ii. 3.

⁶ Ibid. VI., ch. iii. 2.

prince. This retirement from the war was therefore in the sixth year of his reign. Ahasuerus, we now learn from the book of Esther, gave way to the allurements of the harem. Each fair virgin was presented to him in turn, after one year's purification, till at length the royal choice was fixed upon Esther, the cousin of Mordecai the Jew, who was raised to the throne in his seventh year, B.C. 532.

Meanwhile Cyrus continued to conduct the war against Babylon with vigour. After a long siege, the great city was captured during a nocturnal feast, by turning the waters of the Euphrates, and marching into the city along the dry bed of the river, and another king, we are now told, was slain, who must have been Nereglissar, who reigned four years only, and ceased to reign in B.C. 530. It was at this time also probably that Belshazzar was slain, who, we may infer perhaps from the book of Daniel, held a divided position in the government with Nereglissar; for Belshazzar spoke before his death of raising Daniel to the dignity of third person in the empire, implying thereby the existence of a second of great dignity.¹ Thus, by closely following the narrative of Xenophon, we find that Babylon must have fallen in the year B.C. 530, and not 538 as commonly supposed, and in the ninth year of the reign of Cyaxares or Ahasuerus. It was with the army of Cambyses, his father, king of Persia, chiefly, that Cyrus had been enabled to achieve this victory over Babylon; and to Cambyses, therefore, rightfully belonged the dominion over the newly acquired kingdom of Babylonia. Cyrus, we are told, paid much deference at first to Cyaxares, and assigned to him a palace at Babylon, and some of the best of the spoil. Cyaxares, however, was never recognized amongst the Babylonian kings, as we gather from the omission of his name by Berosus. On the other hand, one of the fixed dates in the Babylonian Canon is the seventh year of Cambyses, B.C. 523, as marked by a lunar eclipse observed and registered at Babylon in that year; and from thence we learn, that Cambyses was recognised as lord paramount over Babylon from the year B.C. 529, or the year following the capture by Cyrus.

All this, we know, is quite inconsistent with the history of Cyrus as given by Herodotus. With Xenophon we have seen that it is consistent in almost every particular. Indeed, the accurate agreement and interlacing of Median, Persian, Lydian, and Babylonian history during these first nine years of the reign of Ahasuerus, according to the arrangement of dates before us, is too remarkable to be misunderstood. A high testimony is thus afforded to the truthfulness of

¹ In the Ecclesiastical Canon, Nereglissar is identified with Belshazzar.

Xenophon's assertion, that what he related concerning Cyrus he considered that he had ascertained and believed to be true¹.

The last event in the reign of Cyaxares, mentioned by the Greek historian, is the marriage of Cyrus to the daughter of the Median king², while Cambyzes still continued on the throne of Persia. The nuptials, we may presume, were celebrated by another great feast such as Ahasuerus delighted to indulge in, and this event probably marks the tenth year of his reign, B.C. 529. Xenophon now ceases to guide us, and we again take up the history of Ahasuerus from the Hebrew historian, by whom we are carried on to the twelfth, thirteenth, and fourteenth years of his reign.

We now read of one of most cruel outbursts of religious fanaticism ever recorded in history. At the instigation of his minister, Haman, in his twelfth year, a decree went forth, under the seal of Ahasuerus, to slaughter the whole Jewish people scattered throughout his dominions, on the 13th day of the month Adar in the following year, that is to say, in the thirteenth year of the king's reign, B.C. 528, from which perilous position we know that the Jews were rescued by the intercession of queen Esther. The weak, hasty, and vacillating character of Cyaxares here well accords with what is related of Ahasuerus. Niebuhr indeed has not hesitated to pronounce this book of Esther to be of no historical value. When, however, we consider that the day of this great deliverance of the Jews had been kept in memory by an annual festival, observed down to the time of Josephus, as he himself relates; and that the feast of Purim, or casting of lots, on the 14th day of the month Adar, is one of the most important festivals in the Jewish calendar, even to the present day, it is hardly reasonable to doubt the substantial truth of this narrative, or to doubt that the Jews were objects of hatred to the Medes and Persians in this reign. Nevertheless, it is hard to account for the idea of an indiscriminate slaughter of a whole nation as the result merely of sudden impulse or caprice on the part of any prince, however cruel or unwise. Some previous preparation for such an event must, we should expect, have taken place throughout the dominions of this despot. The religious tenets and doctrines of the Jews must have become generally obnoxious to the people among whom they dwelt, before such a widely operating decree could have been carried into practical execution. Now we know that a state of religious ferment had arisen throughout the whole empire about this time, which might readily account for the violent and universal feeling thus excited against the Jews. It was about

¹ Xen. I., ch. i. 6.

² Ibid. VIII., ch. v. 20.

this very period that the great spiritual revolution in the East, which, under the influence of the Magi, ultimately prevailed, and brought back the Medes and Persians from the idolatrous worship of the heavenly host to the worship of the one God, began to agitate the minds of thinking men throughout those countries¹. Much such a state of ferment then existed, as when Mahomet, in after days, forced his religion, sword in hand, upon the nations of the East. Now the religion of the Magi as now purified and enforced, we have every reason to believe, was indebted for some of its noblest sentiments to Jewish sources, and contained many of the leading doctrines of the holy people. Zoroaster is said to have been the disciple of a Jewish prophet². If the book entitled "Zendavesta," now extant, in any way represents the doctrines of this great reformer, it would appear that he taught the existence of one Eternal Being; the immortality of the soul; the resurrection of the body; the reward of the virtuous in a future state; and he is said to have spoken of the coming of that great Prince whose appearance was looked forward to throughout the East, and at whose birth the Magi, his followers, came to pay their adoration at Jerusalem. It was the increasing prevalence of these religious doctrines, so nearly allied to those held by the Jews, which had now stirred up the deepest passions of the Medes and Persians in defence of their accustomed worship; and as it was in the reign of Darius, the son of Hystaspes, that Zoroaster's doctrines ultimately prevailed, we may presume that the struggle between religious parties was at the highest during the preceding reign, and in the beginning of the reign of Darius. The decreed massacre of the Jews in B.C. 526, in the reign of Ahasuerus, well accords therefore with the religious temper of the times, as also does that general slaughter of the Magi in the early part of the reign of Darius, occasioned, as I conceive, by a premature attempt of the followers of Zoroaster to overthrow the corrupt religion of the State, and to set up the reformed doctrines of the Magi in its place, together with a Magian ruler on the throne. All which may be collected from the tenor of the Behistun inscriptions. This slaughter of the Magi, like the deliver-

¹ This was an age of deep religious and philosophical speculation throughout the East—the age of Daniel, of Pythagoras, and, according to Persian tradition, of Zoroaster, the two latter of whom are said to have sought the banks of the Euphrates, to drink the cup of wisdom from the hands of the wise men and astrologers of Babylon.

² Prideaux argues, from his thorough knowledge of the Jewish religion and the sacred writings of the Old Testament, that probably he was of Jewish origin. —Prid. Con., vol. i., p. 300.

ance of the Jews, was celebrated by an annual festival for some years after, called "the festival of the Magophonia".

It was in the month Adar, the last Jewish month of the year B.C. 526, that the Jews were allowed by decree to stand on the defensive against their enemies, after which we read that Mordecai was raised to great power by Ahasuerus; that tribute was laid upon the isles of the sea, that is, upon the isles of the Persian Gulf, and perhaps beyond it, lately subject to the king of Babylon, but now within the dominions of Ahasuerus of the seed of the Medes; and that all these things were recorded in the "book of the Chronicles of the kings of Media and Persia." It may be observed, that the precedence is given indiscriminately either to the Medes or the Persians in the book of Esther, which agrees not inaptly with the time of transition of power from the hands of the Medes to the Persians. In the beginning of the reign of Ahasuerus, the Medes, as we have seen, were without doubt allowed nominal precedence. Towards the end of that reign circumstances were entirely reversed. And when the book of Esther was written, probably in the reign of Darius, the son of Hystaspes, the common order of precedence in everybody's mouth was, without doubt, Persia and Media. How long Ahasuerus continued to reign after the triumph of the Jews over their persecutors, or to whom he bequeathed his dominions, we are not told in the book of Esther. That he died without male issue we know from Xenophon. Yet we read in the book of Daniel of a certain Darius, who styled himself son of Ahasuerus, and who, we shall find, ruled over these same hundred and twenty-seven provinces, and at Susa, who will next come under our consideration. Let us close this sketch of the reign of Ahasuerus with the observation, that while the history of this king, and the history of Cyaxares, when read separately, as referring to two different kings, and according to the common arrangement of dates, have always borne a vague, unfixed, and almost fabulous character; when thus viewed in connexion with each other, as the history of one king in the manner proposed, assume a substantial and well-defined position in history, and form together a most interesting reign, full of leading and important events.

We now come to consider the reign of the last king under whom the Medes set up any claim to independence before their final absorption in the empire of Persia, and one who has caused as much trouble and perplexity as Ahasuerus, in the endeavour to fix his time in conformity with the common chronology. He is mentioned, as we have

¹ See some excellent remarks of Mr. Rawlinson on this subject.—Rawlinson's *Herodotus*, vol. ii. p. 548.

observed, in the book of Daniel under the title, "Darius, the son of Ahasuerus, of the seed of the Medes," and also "Darius the Mede." He is usually supposed, though contrary to all Chaldee authority, to have reigned over Babylon during the years B.C. 538 and 537; and, though Daniel, his minister, calls him Darius, son of Ahasuerus, that he was really Cyaxares, son of Astyages. This double contradiction in title is sufficient to set aside such an idea, though it has long prevailed. His name was Darius, and for that name alone must we look in secular history for his representative. Now, there is no trace to be found in any original history of these times of any king bearing the title Darius, before the reign of Darius, son of Hystaspes—no record has been found of any such king, either upon bricks or monuments, in course of the recent researches made in the countries over which he must have reigned—nor can his name be found in any list of kings of Babylon which has come down to us, unless he was the son of Hystaspes, though we are expressly told that he was "set over the realm of the Chaldeans." Marcus von Niebuhr in his perplexity has argued, that the Darius of Daniel must have been Astyages, son of Cyaxares, or Ahasuerus; and Mr. Rawlinson, though more doubtfully, is inclined to adopt the same opinion. But if Astyages came to the throne of Babylon in the year B.C. 538, as supposed, and at the age of sixty-two, as we are told by Daniel, then must he have been born in the year B.C. 600, the very year in which his grandson Cyrus is assumed to have been born, according to the common reckoning of his age, as seventy at the time of his death, in B.C. 530. Astyages also having married in the year of the eclipse B.C. 585, in his sixteenth year, must thus be supposed to have been conquered by his grandson Cyrus twenty-five years after his marriage, which is impossible. From all which it would appear, that according to the common mode of arranging the history and chronology of this period, the time, place, and person of Darius the Mede are matters, to this day, as little ascertained as of some of the kings of the most fabulous times of ancient history.

Under the scheme before us, no doubt or perplexity can arise in fixing the exact time at which Darius the Mede must have reigned. We have seen that his reputed father, Ahasuerus, must have died after the year B.C. 525 or 526, and that he left no male heir to succeed him on the throne. We know that it has always been the practice of despotic princes to appoint or adopt their successors; and any one styling himself son of Ahasuerus, could therefore only have become entitled to do so by the law of adoption, so common and sacred in the East, and so frequently had recourse to in those countries in our own

days, on the failure of male heirs. It is the violation of this ancient law which, in great measure, has been the origin of the present troubles in our Eastern dominions. It is this which has caused the bitter enmity of Nana Sahib, the most active and cruel of the insurgents; whilst, on the other hand, the recognition of the law of adoption has secured to us the steady support of Holkar and Scindia, our two most faithful adherents¹. If Ahasuerus died without male issue, we may be certain that he did not fail to exercise this power of appointment; and Darius, who called himself "son of Ahasuerus," must in fact have been the son of any one but that prince. Now Darius, the son of Hystaspes, who, even at the age of twenty, had been accused of ambitious designs upon the throne, and whose talents for government were afterwards so fully exhibited, would seem to be a likely prince to have been selected by Ahasuerus as his successor, considering his known jealousy of Cyrus, his son-in-law. But when we know the fact, that Darius, the son of Hystaspes, actually came to the throne in the year B.C. 521, as certified by two lunar eclipses observed at Babylon in his reign, and that this was just about the time when Ahasuerus may be supposed to have died, it amounts almost to certainty that the son of Hystaspes was he who was called, at his accession, "Darius the Mede." The seat of government of this Darius we know was at Susa; and both Josephus and the first book of Esdras speak of Darius who decreed the rebuilding of the Temple of Jerusalem, who was, without dispute, the son of Hystaspes, as having reigned over one hundred and twenty-seven provinces². The evidence of the book of Daniel will lead us with equal distinctness to the same conclusion. In the ninth chapter of Daniel we read, that "in the first year of Darius, the son of Ahasuerus, of the seed of the Medes," that is, in the first year of his reign, "*what time* he was set over the realm of the Chaldeans," Daniel knew by books that the seventy years' desolation decreed upon the city of Jerusalem were just coming to an end. That he so interpreted the duration of the seventy years we may conclude from the fact, that he then prayed that Jerusalem and the Temple

¹ This practice of adoption is referred to in the modern Persian history of Cyrus, though not exactly in accordance with our views of that history. Sir John Malcolm writes: "Kai-Khosro resolved to devote the remainder of his life to religious retirement. He delivered over Cabul, Zabulistan, and Neemroz to Roostum as hereditary possessions; and resigned his throne to Lohrasp, the son-in-law of Kai-Kaos, and his own son of adoption and affection."—History of Persia, vol. i. p. 53.

² The Septuagint translation of Daniel makes Darius the Mede also to have reigned over 127 provinces.

might immediately be restored. This "desolation" of the city of Jerusalem, we collect from the 2 Chron. xxxvi., 19—21, was counted from the time of the burning of the house of God, and the destruction of the city: so that, the first year of Darius, son of Ahasuerus, spoken of by Daniel, was about seventy years after the fall of that city, in the nineteenth year of Nebuchadnezzar, the date of which we have already fixed to the year B.C. 562. Counting, therefore, seventy years downwards from that date, we come to the year B.C. 493, which falls within the latter part of the reign of Darius, the son of Hystaspes. According to this computation, therefore, there can be no question that Darius, the son of Hystaspes, is the king referred to by Daniel as the son of Ahasuerus. That this computation is correct, even to a single year, is confirmed by another equally distinct mark of time mentioned by Daniel—viz., that Darius was about three score and two years old when he came to the throne of the Chaldeans. Now Darius, the son of Hystaspes, died in the year B.C. 485, having, as Ctesias relates, entered his seventy-second year; for he says that he died at the age of seventy-two. Darius, therefore, would thus have completed his sixty-second year in B.C. 494, and from his birth-day in that year to his birth-day in B.C. 493, would have been properly spoken of as about three score and two years old. The coincidence of these two independent modes of computation, bringing us to the same year (B.C. 493) as the first year of Darius, the son of Ahasuerus, is sufficiently conclusive that Darius the Mede, and Darius, the son of Hystaspes, were one and the same prince.

To those who have faith in the prophetic calling of Daniel, there is a still further mark of time, pointing to the very same year, B.C. 493, as the first year of Darius, which is too remarkable to be passed by in silence, though not of the same purely logical character as the preceding. It was in the first year of Darius that the famous prophecy of the seventy weeks, or 490 years, was delivered, predicting the coming of the Messiah at the expiration of that period. This prophecy, therefore, was literally accomplished by the birth of Christ in the year B.C. 3 or 2, exactly 490 years after the prediction, as thus placed in B.C. 493.

From the exact concurrence of these three different modes of computation, leading to the same year in the reign of Darius, the son of Hystaspes, I look upon it as a point as clearly and absolutely determined, even as the date of the eclipse of Thales, that Darius the Mede of the book of Daniel was the same as Darius the son of Hystaspes; and that the Medes in the beginning of his reign yet still endeavoured to maintain their independence of the power of Persia.

If so, an entirely new arrangement of the history of the Medes and Persians between the years B.C. 585 and 493 becomes absolutely necessary. We have already seen how the hitherto unfixed reign of Ahasuerus assumes a definite position in history, under the proposed arrangement of dates, and proves to have been recorded in secular as well as in sacred history. It will now appear, that the reign of Darius, the son of Ahasuerus of the seed of the Medes, which has hitherto held an equally unstable footing, is, in fact, one of the reigns most clearly defined in ancient history, and that it is illustrated by abundance of historical facts contained in the book of Daniel, in Herodotus, and in other Greek historians.

It will require much more time and consideration than we have now to bestow, to explain how the events of the reign of Darius may be arranged in conformity with these several sources of his history. This is a subject into which I propose to enter at some future time. I will now conclude by drawing your attention to a very familiar chapter in the book of Daniel, which, according to the view here taken, will assume a new and very prominent position in the life of Darius. We all remember the story of Daniel and the den of lions. We read it, and admire the constancy and piety of the Hebrew prophet. We lay down the story, however, in uncertainty as to who was the king spoken of; we know not where the event took place; and we do not realize the state of the kingdoms of Media and Persia when the confederacy of princes and rulers spoken of was formed against the prophet.

If Darius the Median, however, was Darius the son of Hystaspes, of which I repeat there can be no reasonable doubt, this scene is clearly fixed to about the year B.C. 493, when the king was about sixty-two years old, and to the twenty-ninth year of his reign; and we shall find that it marks the time of the final struggle of the great men of Media and Persia then in power against the introduction of the reformation of Zoroaster or his followers, and of the ultimate triumph over idolatry of the worship of the one Supreme Being. The Magians, we know, had at this time attained to great power and influence in Bactria and other parts of the Persian dominions, under the fostering superintendence of Hystaspes, the father of Darius. Daniel, with his peculiar tenets, had acquired so powerful an influence over the mind of Darius, that the king, we read, now sought "to set him over the whole realm." Such a proposal could not fail to rouse the animosity of the old religious party to the highest pitch. The presidents, and princes, and governors, who had hitherto swayed the councils of Darius, became alarmed, and resolved to overthrow the favoured

minister and the rising party, by exposing their apparent disloyalty in setting their religious opinions above the will of the king. They induced Darius to pass a decree, by which he exalted himself for thirty days above all gods ; and probably persuaded him thus to test the disloyal tendency of the new doctrines before he ventured to proclaim them in his dominions. We know that the result of this plot against the life of Daniel, was the destruction of the whole of the great party thus combined against him. Daniel became more powerful than ever, and a proclamation now went forth under his direction as chief minister of the State, "to all people, nations, and languages that dwell in all the earth. Peace be multiplied unto you. I make a decree, says the king, that in every dominion of my kingdom men tremble and fear before the God of Daniel," &c. This proclamation was issued about the year B.C. 493, in the twenty-ninth year of the reign of Darius, in the first year of his taking "the kingdom," or being "set over the realm of the Chaldeans," and after which he appears to have been styled "king of Assyria".

In the following year, B.C. 492, in the second year of his reign so computed, which by tradition was a year of jubilee, and which was, according to our reckoning, a year of jubilee in regular succession, according to the Levitical institution, the Jews began to rebuild their temple for the worship of the great God ; and Darius soon after issued another proclamation confirming their proceedings. How aptly, it may be observed, does all this agree in point of time with what had taken place in Persia in the first year of the king, as regards the worship of Daniel and his people ; and how inaptly does the suspension of the building of the Temple of Jerusalem come in after the first proclamation of Darius in favour of the worship of Daniel, when placed as usual in the year B.C. 538. But how did it fare with the Magians at this time ? If we are right in tracing a connexion between the reformed religion of Zoroaster and that of the Jews—and if any sympathy existed between the great Magian reformer and the king's most favoured minister, once the master of the magicians and astrologers of Babylon, now was the time when we might look for the triumph of those religious opinions which had so long agitated his dominions. Now, what do we read in the life of Zoroaster concerning the time of the adoption of the religion of the Magi through the Persian dominions ? I will quote a passage from Hyde's "Religion of the Ancient Persians"²:—"When Zerdusht proposed to himself to

¹ Dan. vi. 25.² Esra, vi. 22.³ Hyde's *Religio Veterum Persarum*, p. 317.

recommend his religion to the king of the Persians, he chose for himself a place near the palace of the Persians, which was then Istachr, or Persepolis." Abu Mohammed Mustapha, in his "Life of Gushtasp," (who till lately was always identified with Darius, the son of Hystaspes,) relates, that after this king had reigned *thirty years*, Zerdusht appeared—a wise man, who was author of the books of the Magi. At first Gushtasp was disinclined to the new doctrine, but at length was persuaded, and adopted his religion. He was among the disciples of Ozier (that is, Ezra). Mirkond also, in his history of Gushtasp, relates, that when the king adopted the doctrines of Zoroaster, it was in the face of much opposition; that he put to death many who opposed the religion of the Magi; and that at length all people embraced the worship of fire¹. Thus, while the worship of the God of Daniel was proclaimed throughout the empire in the twenty-ninth year of Darius, son of Hystaspes, and the rebuilding of the Temple of Jerusalem proceeded with in his thirtieth year, and the nobles and princes who opposed this worship were put to death by order of the king, the religion of Zoroaster was adopted by the same Darius about the same thirtieth year of his reign, accompanied in a similar manner by the slaughter of those who opposed it. I will quote one more passage from Hyde, and close these observations. "Bundari," he writes, "somewhere observes, that Zoroaster applied to Gushtasp in the second year of that king's reign, which is inconsistent with the fact that he was the disciple of one of the Jewish prophets, as all affirm. Elsewhere, however, he places the approach of Zoroaster in the thirtieth year of the king²." But as I have already shown that the thirtieth year of the reign of Darius was also the second year of that king according to another computation, this apparent contradiction is, in fact, a curious corroboration of the arrangement of the reign of Darius the Mede as it has been deduced from the book of Daniel.

Thus, then, this apparently pointless and abrupt chapter of the book of Daniel must be looked upon as marking the date of one of the most extraordinary epochs in the history of Asia—viz., the date of the overthrow of Sabeanism, and the last remnant of that idolatry, and the adoption of the comparatively pure worship of the Magi throughout the Persian empire. It marks also the date of the final emancipation of the Jews from their long servitude in those eastern countries, whither they had been scattered on the breaking up of the kingdoms of Israel and Judah by the Assyrians, and Babylonians, commencing

¹ Shea's Translation of Mirkond, p. 285.

² Religio Veterum Persarum, p. 310.

with the fall of Samaria in the year B.C. 696, and lasting throughout the whole period we have been considering, even down to the year B.C. 493. Through the reigns of Deioces, Phraortes, Cyaxares, and Astyages, we watch the gradual spreading of this remarkable people through the provinces of Assyria and Persia ; and with their dispersion, trace the growth of a purer worship in the countries where they dwelt. We find the struggle between idolatry and monotheism at its height of intensity during the bloody persecutions of the reign of Ahasuerus, and the early years of Darius, his adopted son, till at length, in the year B.C. 492, when Darius had attained to the highest pinnacle of his power, the great object, we may assume, of the dispersion of this people was suddenly accomplished, by the recognition of their faith, and by the forcible promulgation of the kindred worship of the Magi throughout the empire.

I am aware that certain eminent philologists have disputed the fact of Zoroaster's existence in the reign of Darius, the son of Hystaspes, or Gushtasp, and have adopted the notion of the Greeks—that he lived 5000 years before the Trojan war, in preference to Persian tradition as contained in the *Boundelesh*, and the writings of the Arabians¹. The arguments of some of these writers, however, are so vague and shadowy, and appear to be so tinged with the preconceived notion of the existence of man upon the earth for some 20,000 years before the Christian era, that at present they produce no distinct impression of truth. It matters little, however, with regard to the foregoing statement, whether they are right or wrong in their suggestions ; and whether it was Zoroaster himself, or his followers in ages after his death, who reformed the worship of the Persians in the reign of Darius, of these two facts, at least, we may be assured :—

1st. That just previous to the reign of Darius, a religious revolution was attempted by the Magi in Persia, and that the leading doctrine of their religion at that time was the existence of one Supreme Being.

2nd. That towards the end of the long reign of the same Darius, when he was of the age of about sixty-two, the worship of the God of Daniel, the one Supreme Lord of the universe, was proclaimed throughout the empire of Persia by that king,

¹ See Bunsen's *Egypt's Place*, &c., vol. iii. p. 457. |

ART. III.—*The Indian Travels of Apollonius of Tyana.* By
OSMOND DE BEAUVOIR PÉRIEUX, Esq.

[Read 19th February, 1859.]

PHILOSTRATUS, in his life of Apollonius Tyanensis, has given an account of that philosopher's visit to India; and as he professes to have drawn his materials from the note-book of Damis, Apollonius's fellow traveller and friend, as indeed he professes to have edited that note-book much as Hawkesworth edited the journals of Cook, we may fairly assume that he has given an original and authentic account of India, and the only one that has come down to us from the olden world in a complete state. Again, as Apollonius was the only Greek who up to this time had visited India for other purposes than those of war, negotiation, or commerce; as he visited it to make himself acquainted with its rites, discipline, and doctrines; and as he travelled unincumbered by a retinue, and was welcomed by its kings, and was, with Damis, for four months the guest of its Brahmans; he, and Damis with him, had every opportunity of familiar intercourse with all classes of its population, and of thus acquiring much and accurate information on matters beyond the reach of ordinary travellers. Philostratus's account, then, is full of promise; and I propose to give a condensed translation of it, and afterwards to examine into its authority and value.

Towards the close of the first half century of our era, Apollonius being then upwards of 40 years of age¹ and resident at Antioch, set out to visit India, its Brahmans and Sramans (Γερμανες). He took with him only two family slaves, to act apparently as his secretaries²; arrived at Nineveh, he met with and was joined by Damis, a native of the place, who recommended himself to his notice by a practical knowledge of the road to Babylon, and an acquaintance with the Persian, Armenian, and Cadusian languages. Together they journey

¹ Yet he speaks of himself as a young man, προσκειν γαρ νεψ ανδρι αποδημειν —I. B. 18 c.

² I presume this from their qualifications; the one is a good, the other a quick penman: μετα δυοιν θεραποντων, οικειν αυτη πατριω ηστην, ο μιν ες ταχος γραφων, ο δ' ες καλλος.—ib.

on to Babylon, but warned by a dream first turn aside to visit Cassia and those Eretrians, whom Darius, 500 years before, had settled there, and whom they find still speaking Greek, and still, as they heard, using Greek letters¹, and still dwelling near that wondrous fountain Herodotus so carefully described.

At Babylon, Apollonius and his friend and attendants remain 18 months; and then, in the beginning of summer, proceed for India on camels, and with a guide furnished by the Parthian king Bardanes. Of their route we know only that it lay through a rich and pleasant country, and that the villages they passed hurried to do them honour and to supply their wants; for a gold plate on their leading camel announced them guests of the king. We now hear of them enjoying the perfumed air² at the foot of Caucasus, the Hindu-kuh, which, while it separates India from Media, extends by one of its branches to the Red Sea³. Of this mountain, they heard from the barbarians myths like those of the Greek. They were told of Prometheus and Hercules, not the Theban, and of the eagle; some pointed to a cavern, others to the mountain's two peaks, a stadium apart, as the place where Prometheus was bound, and his chains, though of what made it is not easy to guess⁴, still hung, Damis says, from the rocks. His memory too is still dear to the mountaineers, who for his sake still pursue the eagle with hate; and now lay snares for it, and now with fiery javelins destroy its nest⁵. On the mountain they find the

¹ The Germans whom Theodoric in the sixth century located in the mountains of the Vicentino, and who are known as the "Sette Comuni," are to this day Germans; and the French refugees after the Edict of Nantes, who settled at Friedrichsdorf in Hesse Homburg, are still French; that these Eretrians then should during so many years have retained their language and customs is nothing very extraordinary. But is it not strange that from the day of their expulsion from Greece their voice has never been heard save in these pages of Philostratus? and almost incredible, that, though so near to Babylon, they escaped the notice of Alexander and his historians, who the one so signally punished, and the other so carefully recorded the punishment of the perfidious and self-exiled Branchidæ?—Strabo l. xi. xii. c. 49.

² So Burnes describes the plain of Peshawar, "thyme and violets perfumed the air," (Cabool, ii. 70.) At Muchnee "a sweet aromatic smell was exhaled from the grass and plants," (ib. 101).

³ Wilford says "the Indian ocean is called Arunoda, or the Red Sea." (As. Res. viii. p. 316)

⁴ *Και δῆγμα ὁ Δαμῖς ἀνηθῆαι τῶν πετρῶν λέγει, οὐ ραδία συμβάλλειν τὴν ὄλυν.*—II. B. 3 c.

⁵ The same tale is in Arrian and Strabo. Wilford thus accounts for it: not far from Banyam is the den of Garuda, the bird-god; he devoured some servants of Maha Deva, and this drew upon him the resentment of that irascible deity, whose servants are called Pramat'has.—As. Res. viii. 259.

people already inclined to black¹, and the men four cubits high : on the other side the Indus the men reached five cubits². On their way to the river, as they were going along in the bright moonshine, an Empusa met them, who now in this form now in that, pursued them ; but Apollonius, and his companions at his instigation, railed at it, the only safeguard against it, till it fled away jabbering³.

As they approached the summit of the mountain,—the dwelling of the Gods as their guide told them,—they found the road so steep that they were obliged to go on foot. On the other side, in the country between Caucasus and the Cophen⁴, they met men riding on elephants, but they were only elephant herdsmen ; others on dromedaries, which can run 1000 stadia in a day without rest⁵. Here an Indian on a dromedary rode up to them and asked their guide whither they were going ; and when he heard the object of their journey he told the herdsmen, who shouted for joy, called to them to come near, and gave them wine and honey, both got from the palm ; and also slices of lion and panther flesh, just killed⁶. They accepted everything but the flesh, and rode onward in an easterly direction.

At a fountain they sat down to dine ; and, in the course of conversation, Apollonius observed that they had met many Indians singing, dancing, and rolling about, drunk with palm-wine⁷, and that the Indian money was of orichalcum and bronze—purely Indian, and not stamped like the Roman and Median coins⁸.

¹ Strabo xv. l. c. §13. Arrian, *Indica*, c. vi.

² Onesicritus *Frag. Hist. Alex.* Didot., p. 55, § 25. Lord Cornwallis (*Correspondence*) remarks on the great height of the Bengal Sepoys ; Sir C. Napier (*Life*) thinks our infantry average two inches below them, but cover more ground. Tall men therefore ; but five cubits !

³ "At the foot of the Indus and Cabool river . . . an ignis fatuus shows itself every evening."—Burnes, II., p. 68.

⁴ Cophen, the Cabool. Caucasus Grāvākāsas, the bright rock mountain, Bohlen, "Das Alte Indien," I. p. 12.

⁵ Elphinstone says "An elderly minister of the Raja of Bikaner . . . had just come on a camel 175 miles in three days. (Caulbul, Introduction, p. 230, I. v.) Sir C. Napier mentions a march of 80 or 90 miles by his camel corps without a halt ("Life of Sir Ch. Napier," II., 418), and has no doubt with riding camels of marching 200 miles in 48 hours.—III., 78.

⁶ An exaggeration of a remark of Arrian's, probably : Σιτοφαγοὶ δὲ . . . Ἰνδοὶ εἰσιν, ὅσοι γε μὴ ὀρεῖαι αὐτῶν οὐτοὶ δὲ τὰ θηρία κρεα σιτρύντα. ("Indica," xvii. § 5) e. g. "bears' flesh and anything else they can get (Elphinstone of Caufiristaun, *ib.* II., 434), "they all eat flesh half raw,"—*ib.* 438.

⁷ Of the same mountaineers, Elphinstone : "they drink wine to excess" (*ib.*) Ælian, I. 61, speaks of the Indian drinking bouts ; Pliny of the wine : "Reliquos vinum ut Indos palmis exprimere" (*Hist. Nat.*, vi, 32). The Vishnu Purana of wine from the Kadamba tree,—p. 571, note 2.

⁸ The Indian money is : ὕλη κεκομψευμένη, metal refined, prepared : the

They crossed the Cophen, here not very broad or deep, themselves in boats, their camels on foot, and now entered a country subject to a king. Here they saw Mount Nyssa; it rises up to a peak, like Tmolus¹ in Lydia. It is cultivated, and its ascent has thus been made practicable. On its summit they found a moderate sized temple of Bacchus; this temple was a circular plot of ground, enclosed by a hedgerow of laurels, vines, and ivy², all of which had been planted by Bacchus himself, and had so grown and intertwined their branches together as to form a roof and walls impervious to the wind and rain. In the interior Bacchus had placed his own statue—in form an Indian youth, but of white stone. About and around it lay crooked knives, baskets, wine-vats in gold and silver, as if ready for the vintage. Aye, and the cities at the foot of the mountain hear and join in his orgies, and Nyssa itself quakes with them.

About Bacchus³, Philostratus goes on to say—whether speaking in his own person or from the journal of Damis I know not—Greeks and Hindus are not agreed; for the former assert that the Theban Bacchus with his bacchanals conquered and overran India, and they cite, among other proofs, a discus of Indian silver in the treasury at Delphi, with this inscription: “Bacchus, Jove and Semele’s son, from India to the Delphian Apollo.” But of the latter, the Indians of the Caucasus believe that he was an Assyrian stranger, not unacquainted however with him of Thebes; while those of the Indus and Ganges declare that he was the son of the Indus⁴, and that the Theban Bacchus was his disciple and imitator, though he called himself the son of Jove,

Roman *κεχαργμενη* stamped. In Menu’s time gold and silver coins were probably unknown, for he gives (viii, 131,) “the name of copper, silver, and gold weights commonly used among men:” *Ἰλη κεκομψευμενη* probably; but when Apollonius visited India we know that money, gold and silver coins were current, issued by the Indo-Greek and Indo-Scythic kings,—*vide* Lassen, “Baktrische Könige,” *passim*.

¹ Nishadha, probably, to the south of Meru (Vishnu Purana, 167.) Arrian similarly connects Tmolus with Nyssa (Exped. Alex. v. 1.)

² Laurels and ivy Alexander finds on Meru; vines, too, by implication (Arrian Exped. v. ii. 65). Burnes says that in Cabool the vines are so plentiful that the grapes are given for three months in the year to cattle (*ut sup.* ii. 131. See also Wilson’s *Ariana Antiq.* p. 193.)

³ Chares (“Hist. Alex.,” p. 117, §13) one of the historians of Alexander, speaks of an Indian god *Σοποάδειος*, which in Greek means *οἰνοποιος*, the wine maker, Sanscrit, Suradevas (von Bohlen), but the Vishnu Purana knows of no wine god, only of a wine goddess (*vide* p. 76). In general, however, Bacchus may be identified with Siva, and Hercules with Vishnu and Krishna.

⁴ For the Indo-Bacchus myth see Arrian, v. 1, who receives it with hesitation; and Strabo, xv. 1, 9, who rejects it; Lassen, *Ind. Alt.* II. 133; von Bohlen, *ut sup.*, I. 142; and Schwanbeck on Megasthenes, “Frag. Hist.,” II. 420, Didot,

and pretended to have been born of his thigh (*μηρος*), from Meros, a mountain near to Nysa. They add, that in honour of the Indian Bacchus, he planted Nysa with vines brought from Thebes. And here, according to his historians, Alexander celebrated his orgies; while, according to the mountaineers, notwithstanding his love of glory and of antiquity, he never ascended the mountain¹, but satisfied himself with prayer and sacrifice at its foot: he so feared lest the sight of the vines should raise in his soldiers, long accustomed to water, a longing for wine and the ease and pleasures of home.

The rock Aornus,² though at no great distance from Nysa, Damis says he did not visit, as it was somewhat out of their way. He heard, however, that it had been taken by Alexander; and was fifteen stadia in height; and that it was called Aornus, not because no bird could fly over it, but because there was a chasm on its summit which drew down to it all birds, much like the Parthenon at Athens, and several places in Phrygia and Lydia.

On their way to the Indus, they fell in with a lad about thirteen years old, riding an elephant and urging him on with a crooked rod, which he thrust into the elephant like an anchor. On the Indus itself they watched a troop of about thirty elephants, whom some hunters were pursuing³; and Apollonius admired the sagacity they displayed in crossing the river, for the smallest and lightest of them led the way, then followed the mothers holding up their cubs with their tusks and trunks, while the largest of them brought up the rear. He spoke of their docility; their love for their keeper, how they would eat out of his hand like dogs, coax him with their trunks, and, as he had seen among the nomads, open wide their mouths for him to thrust his head down their throats. He told too, how during the night they would bewail their slavery, not with their usual roar but with piteous moans; and how, out of respect for man, they would at his approach stay their wailing; and he referred their docility and ready obedience more to their own self-command and tractable nature, than to the skill or power of their guide and rider.

From the people they heard that elephants were found in the marsh, the mountain, and the plain. According to the Indians, the

¹ According to Arrian, *ut sup.* and II. 5, it was Meru that Alexander ascended, and on Meru that he feasted and sacrificed to Bacchus.

² Aornus; Awara, Awarana, a Stockada.—Wilson *Ariana Antiqua*, p. 192; but Renas according to v. Bohlen, and Rani-garh according to Lassen, *Indische Alterthums*: 140, note 7.

³ Just in the same locality (see Arrian, IV. xxx. 7) Alexander first sees a troop of elephants, and afterwards joins in an elephant hunt.

marsh elephant is stupid and idle; its teeth are few and black, and often porous or knotted, and will not bear the knife. The mountain elephants are treacherous and malignant, and, save for their own ends, little attached to man; their teeth are small, but tolerably white, and not hard to work. The elephants of the plain are useful animals, tractable and imitative; they may be taught to write, and to dance and jump to the sound of the pipe; their teeth are very long and white, and the ivory-cutter can do with them just what he pleases. The Indians use the elephant in war; they fight from it in turrets, large enough for ten or fifteen archers or spearmen; and they say that it will itself join in the fight, holding and throwing the spear with its trunk as with a hand. The Indian elephant is of a large size, as much larger than the Libyan as this than the Nisæan horse. It lives to a great age, and Apollonius saw one in Taxila which had fought against Alexander about 350 years before, and which Alexander had honoured with the name of Ajax. On its tusks were golden bracelets, with this inscription: "Ajax to the sun, from Alexander, Jove's son." The people were accustomed to anoint it with unguents, and ornament it with garlands¹.

When about to cross the Indus, their Babylonian guide, who was unacquainted with the river, presented to the Satrap of the Indus a letter from Bardanes. And the Satrap, out of regard to the king, though no officer of his, supplied them with his own barge for themselves, boats for their camels, and a guide to the Hydraotis. He also wrote to his sovereign, to beg him that, in his treatment of this Greek, and truly divine man, he would emulate the generosity of Bardanes.

Where they crossed, the Indus was forty stadia in breadth². It takes its rise in the Caucasus³; and, from its very fountain, is larger (*μειζον αυτοθεν*) than any other river in Asia⁴. In its course it receives

¹ Pliny (viii. v.) describes the elephant as crossing rivers in the same way; he speaks of their wonderful self-respect, "*mirus pudor*," and of one called Ajax; Arrian (*Indica*, c. 14 and 15) of their grief at being captured, of their attachment to their keepers, their love of music, and their long life extending though to but 200 years (Onesicritus gives them 300, and sometimes 500 years.—Strabo, xv.); Ælian (xiii. §9), and Pliny (viii.), state that they carry three warriors only, and are much larger than the African. The division into marsh and plain, &c., I suspect, is from Juba.

² Ctesias (58 §) says the Indus is 40 stadia where narrowest. See Lassen, *et supra*, II. 637, who accounts for Ctesias' exaggeration (his reasons do not apply to Damis), and Wilson's Notes on the *Indica* of Ctesias, who excuses it (p. 13).

³ "*Indus . . . in jugo Caucasii montis . . . effusus . . . undeviginti accipit amnes . . . nusquam latior quinquaginta stadiis.*"—Pliny *Hist. Nat.*, vi. 23.

⁴ So Ctesias, so Ibn Batuta: "The Scinde is the greatest river in the world, and overflows during the hot weather just as the Nile does; and at this time they

many navigable rivers. Like the Nile it overflows the country, and deposits a mud; and thus, as in Egypt, prepares the land for the husbandman. It abounds, like the Nile, with sea-horses and crocodiles¹, as they themselves witnessed in crossing it (*κομίζομενοι δὲ δια τοῦ Ἰνδοῦ*); and it produces too the same flowers. In India the winter is warm, the summer stifling; but the heat, providentially, is moderated by frequent rains. The natives told him, that when the season for the rise of the river was at hand, the king sacrifices on its banks black bulls and horses (black, among them, because of their complexion being the nobler colour), and, after the sacrifice, throws into the river a gold measure, like a corn measure,—why, the people themselves knew not; but probably, as Apollonius conjectured, for an abundant harvest, or for such a moderate² rise of the river as would benefit the land.

The Indus passed, their new guide led them straight to Taxila, where was the palace of the Indian king. The people now wore cotton, the produce of the country, and sandals made of the fibre of the papyrus³ (*υποδηματα βυβλίου*), and a leather cap when it rained. The better classes were clad in byssus, a stuff with which Apollonius, who affected a yellowish colour in his dress, was much pleased. This byssus grows on a tree, like the poplar in its stem, but with leaves like the willow; it is exported into Egypt for sacred uses.

Taxila⁴ was about the size of Nineveh, walled like a Greek city, and was the residence of a sovereign who ruled over what of old was the kingdom of Porus. Just outside the walls⁵ was a temple of near a hundred feet, of porphyry⁶ (*λίθου κογχυλίου*), and in it a shrine,

sow the land." Burnes, I think, shows that it carries a greater body of water than the Ganges.

¹ Eratosthenes gives it the same animals as the Nile, except the sea-horse. Onesicritus the sea-horse also; Strabo, xv. 1, 13.

² Sir C. Napier attributed a fever which prostrated his army and the natives, to an extraordinary rise of the Indus.—Quarterly Review, Oct. 1858, p. 499.

³ Arrian's Indica: "Their dress is of cotton, their sandals of leather;" but Herodotus gives the Egyptian priests *ὑποδήματα βυβλίνια*, II. 37.

⁴ Wilford (*As. Res.* viii. 349) speaks of Tacshaila and its ruins; Wilson identifies Taxila with Takhasa-gila of the Hindus between the Indus and Hydaspes, in the vicinity of Manikyala.—Ar. Ant., 196. Arrian celebrates its size and wealth the largest city between the Indus and the Hydaspes. V. 8 c. Exped. Alex.

⁵ Ram Raz, (*Architecture of the Hindus*, p. 2), of the temples of Vishnu and Siva, says, that the latter should be without the village. Hiouen-Thsang (*I.* 151) describes Taxila, and speaks of a stupa and convent outside the walls, built by Asoka.

⁶ The top of Manikyala, described by Elphinstone, is 100 feet in circumference, and 70 feet high (*Ari. Ant.* 31). Lassen (*II.* 514 and 1151) speaks of the influence of Greek art on Indian architecture; but adds, that the Indians built

small, considering the size of the temple and its many columns, but still very beautiful. Round the shrine were hung pictures on copper tablets, representing the feats of Alexander and Porus. In these tablets the elephants, horses, soldiers, and armour, were portrayed in a mosaic¹ of orichalcum, silver, gold, and tinted copper (*μελανι χαλκω*); the spears, javelins, and swords in iron; but the several metals were all worked into one another with so nice a gradation of tints, that the pictures they formed, in correctness of drawing, vivacity of expression, and truthfulness of perspective², reminded one of the productions of Zeuxis, Polygnotus and Euphranor. They told too of the noble character of Porus, for it was not till after the death of Alexander that he placed them in the temple,—and this, though they represented Alexander as a conqueror, and himself as conquered and wounded, and receiving from Alexander the kingdom of India.

In this temple they wait until the king can be apprised of their arrival. Apollonius whiles away the time with a conversation upon painting, in the course of which he remarks that colour is not necessary to a picture; that an Indian drawn in chalk would be known as an Indian, and black of colour, by his somewhat flat nose, his crisp hair, his large jaws, and wild eyes³. While they are thus talking, a messenger and interpreter arrive from the king, with a permit for them to enter the city, and to stay in it three days, beyond which time no strangers are allowed in Taxila.

They are taken to the palace. They found the city divided by narrow streets, well-arranged, and reminding them of Athens. From the streets, the houses seemed of only one story, but they all had an underground floor⁴. They saw the Temple of the Sun, and in it statues of Alexander and Potus, in gold, silver, and copper; its walls were of red marble, but glittering with gold; the image of the god was of pearls⁵, having, as is usual with the barbarians in sacred things, a symbolical meaning.

with brick. They may, however, have faced their buildings with stone; and the *λιθος κογχυλιατος* may have been of that porphyry, or red marble, used in the tombs at Tattah.—Life of Sir C. Napier. iv. 38.

¹ Lassen (513-4) states, on Singhalese authority, that the Hindus were skilled in mosaics; and (II. 426-7) he describes a casket the figures on which he supposes were of a mosaic of precious stones.

² Το ευσχιον, το εμπνουν, και το εισεχον τε, και εξεχον.

³ Arrian, Indica vi., and compare with it Vishnu Purana, note 4, p. 100, where is a description of the barbarous races of India.

⁴ Lassen, *ut sup.* 514. The underground floor, Elphinstone says, even the poor have at Peshawur.—Caulbul, Introd., p. 74.

⁵ “On représente le soleil la face rouge . . . ses membres sont prononcés, il

The palace was distinguished by no extraordinary magnificence, and was just like the house of any citizen of the better class. There were no sentinels or body guards, and but few servants about, and perhaps three or four persons who were waiting to talk with the king. The same simplicity was observable in the courts, halls, waiting and inner rooms; and it pleased Apollonius more than all the pomp of Babylon. When admitted to the king's presence, Apollonius, through the interpreter, addressed the king as a philosopher, and complimented him on his moderation. The king, Phraotes, in answer, said that he was moderate because his wants were few, and that as he was wealthy, he employed his wealth in doing good to his friends, and in subsidizing the barbarians, his neighbours, to prevent them from themselves ravaging, or allowing other barbarians to ravage his territories. Here one of his courtiers offered to crown him with a jewelled mitre, but he refused it, as well because all pomp was hateful to him, as because of Apollonius's presence. Apollonius now enquired into his mode of life. The king told him that he drank but little wine, as much as he usually poured out in libation to the sun; that he hunted for exercise¹, and gave away what he killed; that, for himself, he lived on vegetables and herbs, and the head and fruit of the palm, and other fruits which he cultivated with his own hands.² With this account of his kingly tastes and occupations Apollonius was delighted, and he frequently looked at Damia. They then talked together a long time about the road to the Brahmans; and when they had done, the king ordered the Babylonian guide to be treated with the hospitality wont to be shown to travellers from Babylon, and the satrap guide to be sent back home with the usual travelling allowance; and then taking Apollonius by the hand, and ordering the interpreter to leave them, he asked him, in Greek, to receive him, the king, as a table companion. Apollonius, surprised, enquired why he had not spoken Greek from the first. "Because," answered the king, "I would not seem bold, or to forget that I am, after all, only a barbarian; but your kindness, and the pleasure you take in my conversation, have got the better of me, and I can no longer conceal myself from you. And how I became thus acquainted with Greek I will presently show you at large." "But why," again asked Apollonius, "instead of inviting me, did you beg me to invite you to dinner?" "Because,"

porte des pendants à ses oreilles. Un collier de perles lui descend du cou sur la poitrine."—Reinaud, *Mém. sur l'Inde*, p. 121.

¹ "Drinking, dice, women and hunting, let the king consider as the four most pernicious vices."—Menu, vii. 50.

² Arrian, *Indica*, xi. c., 8§.

said the king, "I look on you as the better man; for wisdom is above royalty (*το γαρ βασιλικωτερον σοφια εχει*¹). So saying, he led him to the place where he was accustomed to bathe.² This was a garden, about a stadium long, with a swimming bath of cold running water in the middle of it, and on each side an exercising ground. Here he practised the discus and the javelin, Greek fashion³, and then, when tired, jumped into the water, and exercised himself with swimming. After the bath they went to dinner, crowned with garlands⁴, as is usual with the Indians when they feast in the king's palace.

Of the dinner Damis has given a detailed account. The king, and about five of his family with him, lay on a low couch; the other guests sat on stools. The table was like an altar, about as high as a man's knee; it was in the middle of the room, round, and as large as would be a circle formed by thirty people with joined hands standing up to dance. It was strewed over with laurel, and a sort of myrtle from which the Indians prepare their unguents, and was set out with fish and birds, the carcasses of lions and goats and sows, and with tiger loins⁵—the only part of the tiger they eat, and this because they suppose that at its birth it raises its fore-paws to the rising sun. Each guest, as he wanted anything, got up and went to the table; and taking a bit of this, cutting off a slice of that, he returned to his seat and ate his fill, always eating bread with his meat. When they had had enough, gold and silver bowls, each one large enough for ten guests, were brought in, and from these they drank, stooping down like cattle. In the meanwhile, they were amused by various feats which required considerable skill and courage: a javelin was thrown up, and at the same time a boy leaped upward, and tumbled head over heels while in the air, but in such a way that he passed over the javelin as it fell, and with the certainty of being wounded if he did

¹ The old Stoic maxim: "Solus sapiens rex." Olearius in Philost.

² Hiouen Tsaang, I. 70, 71, describes the nice cleanliness of the Indians, but confines the washing before meat to the hands.

³ Menu of the kingly duties: "Having consulted with his ministers . . . having used exercise becoming a warrior, and having bathed, let the king enter at noon his private apartments for the purpose of taking food" (vii. 216). But Strabo (xv. I. 51) says, the Indians use friction rather than gymnastic exercises.

⁴ "Le roi et ses ministres ornent leurs têtes de guirlandes de fleurs."—Hiouen Tsaang, p. 70, I. v.

⁵ Strabo, quoting Nearchus, better describes the Indians, at least he describes them as we at this day find them: *μηδε γαρ νοσους ειναι πολλας δια την λιτοτητα της διαιτης και την ασινιαν* (xv. 1, 45), their food principally *ορυζαν ροφητην*, rice curry or porridge?—§53.

not properly time his somersault; indeed the weapon was carried round, and the guests tested its sharpness. One man also was so sure of his aim, that he set up his own son against a board, and then threw darts at the board, so aiming them that, fixed in the board, they traced out his son's outline¹.

Damis and the others were much amused with these entertainments; but Apollonius, who was at the king's table, paid little attention to them; and, turning to the King, asked him, how he came to know Greek, and where he acquired his philosophy. The king, smiling, answered, "In old times when a ship put into port, the people used to ask its crew if they were pirates², piracy was then so common. But now, though philosophy is God's most precious gift to man, the first question you Greeks put to a stranger, even of the lowest rabble, is 'Are you a philosopher?' And in very truth with you Greeks, I speak not of you, Apollonius, philosophy is much the same as piracy, for to the many who profess it, it is like an ill-fitting garment which they have stolen, and in which they strut about awkwardly, trailing it on the ground. And like thieves, on whom the fear of justice presses, they hurry to enjoy the present hour, and give themselves up to gluttony, debauchery, and effeminacy; and no wonder, for while your laws punish coiners of bad money, they take no cognizance of the authors and utterers of a false philosophy. Here, on the other hand, philosophy is a high honour, and before we allow any one to study it, we first send him to the home of the Brahmins, who inquire into his character and parentage. He must shew that his progenitors, for three generations, have been without stain or reproach, and that he himself is of pure morals and of a retentive intellect. The character of his progenitors," the king went on to say, "if of living men, was ascertained from witnesses; and if of dead, was known from the public records³. For when an Indian died, a legally appointed officer repaired to his house, and inquired into, and set down in writing his mode of life, and truly, under the penalty of being declared incapable of holding any public office. As to the youth himself, they judged him worthy or otherwise from his eyes, eye-brows, and cheeks, which as in a mirror reflect the mind and disposition.

¹ A Chinese juggler lately performed the same feat in London.

² Allusion to Thucydides, I.

³ Strabo of the Indian city *ediles* says a part took note of the births and deaths, that the birth or death of good or bad men may be known: *μη αφανεις ειναι αι κριτρονεις και χειρους γοναι και θανατοι* (xv. 1, 51); from Megasthenes, *Frag. Hist.*, II. p. 431, § 37, and consult Bardenanestos' account of the *Σαμαναιοι* in l. iv. c. 17 of Porphyry de Abstinentiâ.

The king then told how his father, the son of a king, had been left very young an orphan; and how during his minority two of his relatives according to Indian custom acted as regents, but with so little regard to law, that some nobles conspired against them, and slew them as they were sacrificing to the Indus, and seized upon the government;—how on this his father, then sixteen years of age, fled to the king beyond the Hydaspes, a greater king than himself, who received him kindly, and offered either to adopt him, or to replace him on his throne; and how, declining this offer, he requested to be sent to the Brahmans; and how the Brahmans educated him; and how in time he married the daughter of the Hydaspian king, and received with her seven villages as pin-money (*εις ζώνην*), and had issue one son,—himself, Phraotes. Phraotes told of himself, that he was educated by his father in the Greek fashion till the age of twelve; that he was then sent to the Brahmans, and treated by them as a son, for he observed, “They especially love those who know and speak Greek, as akin to them in mind and disposition;” that his parents died; and that in his nineteenth year, just as, by the advice of the Brahmans, he was beginning to take into his own hands the management of his estates, he was deprived of them by the king, his uncle; and was supported with four servants by willing contributions from his mother’s freedmen (*απελευθερων*). And now, as he was one day reading the *Heraclidæ*, he hears from a friend of his father’s, that if he will return, he may recover the kingdom of his family, but he must be quick. The tragedy he was reading he accepts as an omen, and goes on to say:—“When I crossed the Hydraotis, I heard that, of the usurpers, one was already dead, and the other besieged in this very palace; so I hurried on, proclaiming to the villages I passed through who I was, and what were my rights: and the people received me gladly; and declaring I was the very picture of my father and grandfather, they accompanied me, many of them armed with swords and bows, and our numbers increased daily; and when we reached this city, the inhabitants, with torches lit at the altar of the Sun, and singing the praises of my father and grandfather, came out and welcomed me, and brought me hither. But they built up the drone within, though I begged them not to put him to so cruel a death.”

Apollonius then enquired whether the Sophoi of Alexander and these Brahmans were the same people. The king told him they were not; that Alexander’s Sophoi were the Oxydracæ¹, a free and warlike

¹ Strabo, xv. I. 33, connects them with the Malli. Burnes identifies them with the people of Ooch, the Malli with those of Mooltan.—*Ut sup.* I., p. 99.

race, but rather dabblers in philosophy than philosophers¹; that the Brahman country lay between the Hyphasis and the Ganges; and that Alexander never invaded it—not through fear, but dissuaded by the appearance of the sacrificial victims. “And though,” said Phraotes, “it is true he might have crossed the Hyphasis and occupied the neighbouring lands, yet the stronghold of the Brahman he never could have taken—no, not though every man in his army had been an Ajax or an Achilles. For these sacred and God-loved men would have driven him back—not with human weapons, but with thunders and lightnings, and tempests, as they had routed the Egyptian Hercules and Bacchus, who thought with united arms to have stormed their fort; and so routed them, that Hercules it is said threw away his golden shield, which, because of its owner’s renown and its own embossments², they then set up as an offering in their temple.”

While they were thus conversing, music and a song were introduced, on which Apollonius enquired what the festal procession meant. The king explained to him that it was usual with the Indians to sing to the king, before he retired to rest, songs of good counsel, wishing him good dreams, and that he may rise in the morning a good man and a wise counsellor for his people³. And so talking, they went to bed. The next morning, Apollonius discourses upon sleep and dreams, and the king displays his knowledge of Greek legends. They then separate—the king to transact the business of his kingdom and to decide some law-suits—Apollonius to offer his prayers to the Sun. When they again meet, the king tells Apollonius that the state of the victims had not permitted the Court to sit on that day, and he lays before him a case in dispute—one of treasure-trove, and in land which has just changed hands, the buyer and seller both claiming the treasure. The king is in much perplexity, and states the reasons on both sides; and the suit might have been drawn out to the same length, and become as celebrated as that of the ass and shadow at Abdera, had not Apollonius come to his assistance. He inquires into the life and character of the litigants; finds that the seller is a bad, and the purchaser a good man; and to the last therefore awards the treasure.

When the three days of their sojourn have expired, and the king

¹ Σοφίαν δὲ μεταχειρισσάσθαι, οὐδὲν χρηστον εἰδοῦσας.—Philost. II. c. 33.

² These embossments represented, the king goes on to say, Hercules setting up his pillars at Gades, and driving back the ocean—proof, he asserts, that it was the Egyptian, and not the Theban, Hercules who was at Gades.

³ Menu, among the vices the king is to shun, names dancing and instrumental music (vii. 47), but afterwards advises that, “in the inmost recesses of his mansion, having been recreated by musical strains, he should take rest early.”—vii. 224-5; see, however, *An. Res.*, ix. p. 76.

learns that their camels from Babylon are worn out, he orders that of his white camels¹ on the Indus, four shall be sent to Bardanes, and four others given to Apollonius with provisions, and a guide to the Brahmans. He offers him besides gold and jewels and linen garments; but Apollonius accepts only the linen garments, and this, because they are like the old genuine Attic cloak, and one jewel, because of its mystic and divine properties. He receives also a letter for Iarchas², to this effect:—"The King Phraotes to the Master Iarchas and the wise men with him, greeting:—Apollonius, a very wise man, thinks you wiser than himself, and has travelled hither to learn your doctrine. Send him back knowing all you know. Your lessons will not be lost, for he speaks better, and has a better memory than any man I ever knew. Shew him, Father Iarchas, the throne on which I sat when you gave me the kingdom. His followers are worthy of all praise, if only for submitting to such a man. Farewell."

They leave Taxila, and after two days' journey, reach the place where Alexander is said to have fought with Porus; and they saw there a triumphal arch, the pediment to a statue of Alexander in a four-horse chariot, like that on the Issus. A little farther on, they came upon two other arches, on one of which was Alexander, on the other Porus; the one saluting, the other in an attitude of submission.

Having passed the Hydraotis³, they pursued their way, through different nations⁴, to the Hyphasis. Thirty stadia from the river, they saw the altars Alexander had built there "To Father Ammon and Brother Hercules; to the Providence Minerva and Olympian Jove; and the Samo-Thracian Cabiri and the Indian Sun, and Brother Apollo;" and a bronze pillar with this inscription:—"Here Alexander halted." And this pillar Philostratus conjectures was raised by the Indians in joy at the return homeward of Alexander.

In reference to the Hyphasis and its marvels, we are told that vessels may sail up to its very source, in a plain; but that, lower down, alternate ridges of rock impede its course, and cause eddies which render its navigation impossible. It is about as broad as the Ister, the largest of our European rivers. From the trees on its banks the people obtain an unguent with which marriage-guests besprinkle the bride and bridegroom, and without which no marriage is considered complete, or pleasing to Venus. To Venus, indeed, its groves

¹ Elphinstone (*ut supra*, I. 40) speaks of white camels as rare.

² Probably, suggests Wilford, a corruption from Rac'hyas.—*As. Res.*, ix. 41.

³ Hydraotis, in Strabo Hyarotis, Sanskrit Iravati; Hyphasis, Vipasa.—*Vishnu Purana*, p. 181.

⁴ Strabo gives their number as nine.—xv. I. 3, 33.

are dedicated, as also its fish, confined to one sort, the peacock, so called from their cerulean crest, their spotted scales, and golden tails, which they can open out at pleasure. In this river is also found a sort of white worm, the property of the king, which is melted into an oil so inflammable, that nothing but glass will hold it. This oil is used in sieges, and when thrown on the battlements, it burns so fiercely, that its fire, so far as yet known, is inextinguishable¹.

In the marshes, wild asses are caught, with a horn on their fore-heads², with which they fight, bull-fashion. From this horn is made a cup, of such virtue that if any one drinks out of it, he need for that day fear no sickness, nor wounds, nor fire, nor poison. It is the king's, who also reserves to himself the right of hunting the ass. Apollonius saw the animal, and admired it; but when Damis asked him if he could believe all that was said of the virtue of the cup, he answered, "Yes, when I see any Indian king immortal."

Here they met with a woman black to her breasts, white from her breasts downwards. She was sacred to the Indian Venus, and to this goddess piebald women are sacred from their birth, as Apis among the Egyptians. Thence they crossed that part of Caucasus which stretches down towards the Red Sea; it was full of all sorts of aromatic plants. The headlands produced cinnamon³, a shrub very like a young vine (*νέοις κλημασι*), and so grateful to goats, that if you hold it in your hands, they will follow you, and whine after you like dogs. On the cliffs grow the tall and all other sorts of frankincense, and pepper-trees. The pepper-tree resembles the *άγρος* both in its leaves and the clustered form of its fruit. It grows on precipices inaccessible to man, but frequented by apes, which, as they gather for them the pepper-fruit, the Indians make much of, and protect with arms and dogs against the lion; for the lion will lie in wait for the ape, and eat its flesh as medicine when he is sick, and as food when he is old and no longer able to hunt the stag and wild boar. The pepper harvest is gathered in this way:—Directly under the cliffs where the peppers grow, the people dig small trenches, into which they throw as some-

¹ This worm is mentioned and described by Ctesias, but he places it in the Indus.—Frag. Ctes. Ed. Didot, 27, p. 85.

² This ass and its horn, with some slight difference, are also in Ctesias (ib., p. 25). Wilson sees in this horned ass two animals "rolled into one," the gorkhar, or wild horse, found north of the Hindu-Koh, and the rhinoceros, whose horn has to this day, in the East, a high reputation as an antidote.—Notes on Ctesias, 53 and 49.

³ Strabo, xv. I. 22, but in the south of India. I believe it is indigenous to Ceylon, and is not found in India at all.

thing worthless the fruit of the neighbouring trees¹. The monkeys from the heights watch them, and as soon as it is night, begin like them, to tear the clustered fruits from the pepper, and like them to fling it into the trenches. In the morning the people come back and carry off the pepper, which they thus obtain without any labour.

On the other side of the mountain was a large plain—the largest in India, being fifteen days' journey to the Ganges, and eighteen days' to the Red Sea. It was intersected with dykes running in different directions, and communicating with the Ganges, and serving the double purpose of landmarks and canals for irrigation. The land here is the best in India, black and very productive; its wheat-stalks are like reeds², and its beans three times as large as the Egyptian; its sesame and millet are also extraordinarily fine. Here, too, grow those nuts, which for their rarity and size are, as a sort of wonder often found as offerings in Greek temples. The grapes of the country, however, are small, like the Lydian and Maonian, and with an agreeable bouquet so soon as gathered (*τας δε ἀμπέλους ποτιμούς τε και ανθοσμάς ομου τῷ αποτρύγαν.*) A tree is also found here like the laurel but with a fruit like a large pomegranate, within the husk of which is an apple of the colour of a fine hyacinth, and the very best flavoured fruit they ever ate³.

As they came down the mountain, they witnessed a dragon-hunt. India, its marshes, plains, and mountains are full of dragons⁴. Of these they tell us that the marsh-dragon is thirty cubits long, sluggish, and without a crest; the male very like the female (*ἀλλ' εἶναι τας δρακωνας ὁμοιοι*). Its back is black, and it has fewer scales than

¹ Strabo (ib., § 29) describes a similar trick, by means of which the people catch the monkeys. With regard to that described in the text, Waterton has observed, that the monkey never throws, only lets fall.

² Elphinstone, describing this bank of the Hyphasis, tells only of sand-hills, and hard clay, and tufts of grass, and little bushes of rue. Of the right bank, however, he says: "There were so many large and deep watercourses throughout the journey, that, judging from them alone, the country must be highly cultivated." —Introd. Burnes, too, observes of Balkh: "The crops are good, and the wheat stalks grow as high as in England, and do not present the stunted stubble of India." —*Ut sup.*, II., 206.

³ Can this be the purple mangosteen, such as it might be described by those who only knew of it from hearsay?

⁴ Almost all that is here said of serpents will be found in Pliny (viii., 11, 13); their size, though scarcely so large as those of Philostratus, is noticed by Onesicritus and Nearchus (Frg. Hist. Alex., p. 80 and 105, Didot.); their beards by Ælian (xi., c. 26); the beard and the stone in their heads, with some difference (the stones are *αυτογάλφοι*), by Tzetzes from Poscidippus.—Chil., vii., 653, 660; the magic power of their eyes by Lucan (vii. 657).

the other kinds. Homer, when he speaks of the dragon at the fount in Aulis as of blood-red back, describes the marsh-dragon better than the other poets, who make the Nemean dragon crested; for crested you will hardly find any marsh-dragon.

The plain and hill-dragons are superior to, and larger than, the marsh kind. They move along more swiftly than the swiftest rivers, and nothing can escape them. They are crested; and though in the young the crest is small (*μέριον*), when they are full-grown, it reaches to a conspicuous height. They are of a fiery colour, with serrated backs, and bearded; their necks are erect, and their scales shine like silver. The pupils of their eyes are a fiery stone of wonderful and mystic properties. They are hunted for the sake of their eyes, skin, and teeth. A dragon of this kind will sometimes attack an elephant; both then perish, and are a "find" for the huntsmen. They resemble the largest fish, but are more lithe and active; their teeth are hard as those of the whale.

The mountain dragons are larger than those of the plain, and with a fiercer look; their scales are golden, their beard too, which hangs in clusters; they glide on the earth with a sound as of brass; their fiery crests throw out a light brighter than that of a torch. They overpower the elephant, but become themselves the prey of the Indian. They are killed in this fashion:—the Indians spread out before the serpent's hiding-place a scarlet carpet, with golden characters which, when the dragon rests his head upon them, charm him to sleep. They then, with incantations¹, call him out of his hole; and, if everything goes well—for often he gets the better of them and their "gramary"—as soon as, with outstretched neck, he is lulled in magic sleep, they rush on him with hatchets and cut off his head, and extract from it bright-coloured stones, flashing with every hue, and of powers wonderful as those of Gyges' ring. These dragons are also found in the mountains bordering the Red Sea. They are said to live an incredible age, but of this nothing certain is known.

At the foot of the mountain was situated Paraka, a very large city. Its inhabitants are, from their youth, trained to hunt the dragon, and it is full of their trophies—the heads of dragons. They eat the hearts and livers, as by this means, as was proved by Apollonius himself², they acquire a knowledge of the language and thoughts of animals.

¹ The snake charmer still exists in India. Bochart (*Hieroza.*, cvi. III., II. v.) gives all the passages in ancient authors bearing on the subject.

² At Ephesus (L. iv., c. 3), where he displayed his knowledge of the language of sparrows.

Proceeding onwards, our travellers hear the sound of a shepherd's pipe¹, and presently see a herd of white stags grazing. The Indians keep them for their milk², which is considered very nourishing.

Thence, after a four days' journey through a fertile and well-cultivated country, they approached the stronghold of the Sophoi; and now their guide ordered his camel to kneel, and leapt down, sweating with fear. Then Apollonius knew where they were, and laughed at the Indian, and bade him again mount his camel. The fact is, the near neighbourhood of the Sophoi frightened him; and, indeed, the people fear them more than the king; for the king consults them as he would an oracle, and does nothing without their advice and concurrence³.

When they had reached a village, not the eighth of a mile from the hill of the Sophoi, and were preparing to put up there, they perceived a young man running towards them. He was the very blackest Indian they had yet seen, with a bright spot, crescent-shaped, between his brows, much such a mark as Menon, the Ethiopian foster-child of the sophist Herod, had in his youth. He bore a golden anchor which, as symbolical of holding fast, the Indians have made their caduceus.

When the messenger coming up addressed Apollonius in Greek, as the villagers also spoke Greek, they were not much surprised; but when he addressed Apollonius by name, they were struck with astonishment, all but Apollonius, who, now full of confidence, looking at Damis, said, "The men we have come to visit are wise indeed; they know the future:" and then turning to the Indian, he asked him what he should do, for he wished to converse with the Sophoi immediately. The man answered, "Leave your people here, but come you, just as you are, so they (αὐτοί) request." This "they" seemed to Apollonius quite Pythagorean, and he followed the messenger rejoicing.

The hill of the Sophoi⁴ rose sheer up from the plain, and was about as high as the Acropolis at Athens. It was besides fortified by a goodly belt of rock, on which you might trace the impressions of hoofs, and beards, and faces, and what seemed the backs of falling

¹ Strabo (*ut sup.*, c. 22) says, they have no musical instruments besides cymbals, drums, and κρόταλοι (rattles, castanets?).

² "The milk of any forest beast, except the buffalo, must be carefully shunned."—Menn, v. 11.

³ Vide Hist. Frag. II., 438, on a fragment of Megasthenes and Bardesanes on Brahmans and Samaneans in Porphyry, de Abstem., L. iv., 17 c., *ad calcem*.

⁴ Ctesias tells of a sacred place in an uninhabited part of the country, which the Indians honour in the name of the sun and the moon; it is fifteen days' journey from the Sardinian mountains—*τον δρουν της Σαρδευς*, § 8, p. 81.

men. And they heard that when Bacchus and Hercules attempted the place, Bacchus ordered his Pans, as able to shake it to its foundation (*ικάρους πρὸς τὸν σεισμόν*), to storm it, but thunderstruck by the Sophoi, they fell headlong one upon the other, and so left these marks upon the stones. They said also, that about and around this hill a cloud hung within which the Sophoi dwell, visible and invisible at will, but that there were no gates to their stronghold, so that one could not call it either enclosed or open.

Apollonius and his guide ascended the hill on the south side. He saw a well four fathoms deep, and over its mouth a dark vapour rising¹ with the heat, and giving out at midday all the colours of the rainbow. He was told that here the subsoil was cinnabar (*σανδαράχνη γῆ*), and that the water of the well was sacred, and never used, and that all the people about swore by it. Near this was a crater, which threw out a lead-coloured flame without smell or smoke, and which bubbled up with a volcanic matter that rose to its brim, but never overflowed: here the Indians purified themselves from all involuntary sins. The well, the Sophoi called the well of the test; the crater, the fire of pardon². Here were also seen two casks of black stone—the casks of the winds and of the rain³; and the one is opened or shut as the rain is wanted or otherwise; similarly the other, as wind. Here too they found statues of the most ancient Greek gods, and worshipped in the Greek manner; of the Polian Minerva, and of Bacchus, and of the Delian and Amyclæan Apollo⁴. The Sophoi look upon their stronghold as the very navel of India. They here worship fire obtained from the sun's rays, and daily hymn its praises at midday.

Apollonius, in an address to the Egyptians, somewhat enigmatically describes the life of the Sophoi:—"I have seen," he says, "Brahmans who dwell on the earth, and yet not on the earth; in places fortified,

¹ "In the morning, vapours or clouds of smoke ascended from the wells till the atmosphere was sufficiently heated to hide it," between the Ravi and the Chenab. —Burnes, II., 38.

² With the well of the text compare the test fountain in Ctesias; its water hardens into a cheese-like substance, which, rubbed into a powder and mixed with water, administered to suspected criminals makes them tell all they ever did (§ 14, p. 82); also the water of probation mentioned by Porphyry. With the fire of pardon compare that other water, in some cave temple seemingly, which purified from voluntary and involuntary offences (Porphyry de Styge).

³ Olearius, h. l., suggests that these may have been barometers; and then Damis, like the astronomer in *Rasselas*, merely confounds the power of ferretting with the power of producing.

⁴ Ὁ θαυμαστὸς φιλοσοφίας δι' ἣν Ἰνδοὶ θεοὺς Ἑλληνικοὺς προσκυνοῦσι.—Plutarch de Fortuna Alex. Op. Var. I. p. 585.

and yet without walls; and who possess nothing, and yet all things." According to Damis they used the earth as a couch, but first strewed it with choice grasses: they walked, too, the air¹—Damis himself saw them, and this not to excite wonder—all ostentation is abhorrent to their nature,—but in imitation of and as a more fitting service to the sun. He saw, too, the fire which they drew down from the sun's rays, —not flaming on an altar, nor kept on a hearth though it is material, but flickering in mid-air²; and while in the day time they worship the sun, beseeching him to order the seasons for India's benefit, in the night they worship this fire, lest oppressed by the darkness it should leave them. And in this way is to be understood Apollonius's first assertion: "The Brahmans live on the earth, and yet not on the earth." His second, Damis refers to that covering of clouds which they draw over themselves at pleasure, and which no rain can penetrate. His third, to those fountains which bubble up for his Bacchanals when Bacchus shakes the earth and them, and from which the Indians themselves drink and give to others to drink. Well therefore may Apollonius say, that men, who at a moment's notice and without preparation can get whatever they want, possess nothing and yet all things³. They wear their hair long⁴, like the old Macedonians, and on their head a white mitre⁵. They go bare-foot; and their coats have no sleeves, and are of wild cotton, of an oily nature, and white as Pamphylian wool, but softer⁶. Of this cotton

¹ *Ἀπο τῆς γῆς ἐς πηχίς δύο* (Philos. III., c. 15), two cubits from the ground, no great height, but ce n'est que le premier ponce qui coute.

² Sir C. Napier says, of Trukkee, "On reaching the top, where we remained during the night, every man's bayonet had a bright flame on the point. A like appearance had also been observed going from Ooch to Shapoor."—*Life*, III., 272. May not the night light of the Sophoi be referred to some similar phenomenon?

³ Compare with these fountains those of milk, wine, &c., of which Calanus speaks in his interview with Onesicritus (Strabo, *ut sup.*, § 64); and that happy India, a real pays de Cocagne, which Dio Chrysostom ironically describes in *Celenis Phrygiæ Orat.*, xxxv., II., p. 70.

⁴ Hardy, *Eastern Monachism* (p. 112), by which it would seem that the Brahmans wear long hair; the Buddhist priest, on the other hand, shaves his head; so also Bardesanes describes the newly-elected Samanæan: *ξυραμενός δὲ τοῦ σωματός τα περιττα λαμβανει στολὴν ἀπεισι τε πρὸς Σαμαναίους*.—Porphyry, *ut supra*.

⁵ Still worn by some of the mountain tribes about Cabool. Elphinstone says of the Bikanera, "they wear loose clothes of white cotton, and a remarkable turban which rises high over the head."—Cabool, I., 18.

⁶ Hierocles speaks of the Brahman garments as made from a soft and hairy (*δερματώδη*) filaments obtained from stones (asbestos).—*Frag. Hist.*, iv. p. 430. Barnes says of the Nawab of Cabool, "he produced some asbestos, here called cotton-stone, found near Jelalabad" (ii. 138).

the sacred vestments are made; and the earth refuses to give it up if any but themselves attempt to gather it. They carry a stick¹, and wear a ring, both of infinite and magic power.

Apollonius found the Sophoi seated on brazen stools; their chief, Iarchas, on a raised throne of bronze, ornamented with golden images. They saluted him with their hands, but Iarchas welcomed him in Greek, asked him for the King's letter, and added, that it wanted a δ. As soon as he had read it, he asked Apollonius, "What do you think of us?" "Oh!" said Apollonius, "the very journey I have undertaken—and I am the first of my countrymen who has undertaken it—answers that question." "In what, then," enquired Iarchas, "do you think us wiser than you?" "I think your views wiser, more divine," answered Apollonius; "and should I find that you know no more than I, this at least I shall have learned—that I have nothing more to learn." "Well," said the Indian, "other people usually ask of those who visit them, whence they come and who they are; but we, as a first proof of our knowledge, show strangers that we know them;" and so saying, he told Apollonius who his father was, who his mother, all that happened to him at Ægæ, and how Damis joined him, and all they had said and done in the journey; and this so distinctly and fluently, that he might have been a companion of their route. Apollonius, greatly astonished, asked him how he knew all this. "In this knowledge," he answered, "you are not wholly wanting, and where you are deficient we will instruct you², for we think it not well to keep secret what is so worthy of being known, especially from you, Apol-

¹ "The three first classes ought to carry staves."—Menu, i. 45. "The priest's should reach to his hair."—Ib., 46.

² When Damis speaks of his knowledge of languages to Apollonius, Apollonius merely observes that he himself understands all languages, and that without having learned them; and more—that he knows not only what men speak, but their secret thoughts (L. I., cxix.) But as in India he is accompanied by, and frequently makes use of an interpreter; this pretension of his has, from the time of Eusebius (in Hieroclem, xiv.), been frequently ridiculed as an idle boast. Philostratus however was too practised a writer to have left his hero open to such a charge. His faults are of another kind. His facts and statements too often, and with a certain air of design, confirm and illustrate each other: thus, with regard to this very power claimed by Apollonius, observe that he professes not to speak, but to know all languages and men's thoughts—a difference intelligible to all who are familiar with the alleged facts of mesmerism; and look at him in his first interview with Phraotes; watch him listening to, and understanding the talk of the king and the sages, and only then asking Iarchas to interpret for him when he would himself speak. Observe also that Iarchas admits only to a certain extent the power of Apollonius, and remember his surprise when he finds that Phraotes knows and speaks Greek.

lonius,—a man of most excellent memory. And memory, you must know, is of the Gods the one we most honour. “But how do you know my nature?” asked Apollonius. “We” he answered, “see into the very soul, tracing out its qualities by a thousand signs. But as midday approaches¹, let us to our devotions, in which you also may, if you will, take part.” They then adjourned to the bath, a spring like that of Dirce, in Bœotia, as Damis, who afterwards saw it, says. They first took off their clothes, and anointed their heads with an unguent, which made their bodies run down with sweat, and then jumped into the water, and having washed, they put garlands on their heads and proceeded to the temple, intent on their hymn. And standing round in a circle, with Iarchas as their leader, they beat the ground with their staves, till bellying like a wave it sent them up into the air about two cubits. There they sung a hymn, very like the Pæan of Sophocles sung at Athens to Æsculapius. When they had again come down to the earth and had performed their sacred duties, Iarchas called the youth with the anchor, and bade him take care of Apollonius’s companions; and he, in a shorter space of time than the swiftest birds, was gone and was back again, and told Iarchas,—“I have taken care of them.”

Apollonius was now seated on the throne of Phraotes, and Iarchas bade him question them on any matter he pleased, for he was now among men who knew all things. Apollonius therefore asked, as though it was of all knowledge the most difficult, “Whether the Sophoi knew themselves?” But Iarchas answered quite contrary to his expectation, that they knew all things, because they first knew themselves. That, without this first and elementary knowledge, no one could be admitted to their philosophy. Apollonius, remembering his conversation with Phraotes and the examination they had been obliged to undergo, assented to this, more especially as he felt the truth of the observation in himself. He then asked “What opinion they held of themselves?” and was told, “that they held themselves to be gods, because they were good men.” Apollonius then enquired about the soul, and, when he heard that they held the opinions of Pythagoras, he further asked, whether, as Pythagoras remembered himself as

¹ “At sunrise, at noon, and at sunset, let the Brahman go to the waters and bathe.”—Menu, vi. 22. “Sunrise and sunset are the hours when, having made his ablution, he repeats the text which he ought to repeat.”—II., 222. From the Vishnu Purana, however, it seems the Richas shine in the morning, the prayers of the Yajush at noon, and portions of the Saman in the afternoon.—p. 235. Barthesius, *ut supra*, τον τουνυ χρονον της ημερας ε της νυκτος τον πλιστον εις υμνους των θων απενεμαν ε ευχας,

Euphorbus, so Iarchas could speak of some one of his previous lives, either as Greek or Trojan, or any other man? Iarchas, first reproving the Greeks for their reverence for Trojan heroes and for Achilles as the greatest of them, to the neglect of better men, Greek, Egyptian, and Indian, related how years long ago he had been one Ganges, king of the Indian people, of whom the Ethiopians, then Indians, formed a part; how this Ganges, ten cubits in stature and the most comely of men, built many cities, and drove back the Scythians who invaded his territories; and how, though robbed of his wife by the then king of Phraotes's country, he had unlike Achilles kept sacred his alliance with him; how too he had rendered his father, the Ganges¹ river, propitious to India, by inducing it to keep within its banks, and to divert its course to the Red Sea²; how, notwithstanding all this, the Ethiopians murdered him, and were driven by the hate of the Indians, and the now sterile earth, and the abortive births of their wives, to leave their native land; and how, pursued by his ghost, and still suffering the same ills, they wandered from place to place, till having at length punished his murderers they settled in that part of Africa from them called Ethiopia. He told, too, how Ganges had thrust seven adamantine swords deep into the ground in some unknown spot, which when the oracles declared it sacred, he then a child of four years old immediately pointed out. But ceasing to speak of himself, he directed Apollonius's attention to a youth in the company of about twenty, whom he described as patient under all suffering, and by nature especially fitted for philosophy, but beyond measure averse to it; and whose aversion was the consequence of the ill-treatment and injustice he had received from Ulysses and Homer in a former life. He had been Palamedes.

While they were thus talking, a messenger came from the king to announce his approach, and that he would be with them towards evening, to consult on his private affairs. Iarchas answered that he should be welcome, and that he would leave them a better man for having known this Greek. He then resumed his conversation with Apollonius, and asked him to tell something of his previous existence. Apollonius excuses himself, because as it was undistinguished he didn't care to remember it. "But surely," observed Iarchas, "to be the pilot of an Egyptian ship is no such ignoble occupation, and such I see you once were." "True," replied Apollonius, "but a position

¹ The Ganges is a goddess.—Vishnu Purana.

² Wilford refers this to the legend of Bhagiratha, "who led the Ganges to the ocean, tracing with the wheels of his chariot two furrows, which were to be the limits of her encroachments."—As. Res., viii. 298.

which should stand on a par with that of the statesman or the general has by the fault of sailors themselves, become contemptible and degraded. Besides the best of my acts in that life no one then thought worthy even of praise." "But what great deed did you then perform?" asked Iarchas. "I don't speak of doubling with slackened sail Malea and Sunium, or of carefully observing the course of the winds, or of carrying your ship over the reefs and swell of the Eubœan coast." "Well," said Apollonius, "if you will compel me to speak of my sailor life, listen to an act of mine in it which seems to me a right one. In those days pirates infested the Phœnician Sea. And some of their spies, seeing that my ship was richly freighted, came to me and sounded me, and asked me what would be my share of the freight. I told them a thousand drachmas, for we were four pilots. 'And what sort of a home have you?' they asked. 'A hut on Pharos, where Proteus used to live,' I answered. 'Well,' they went on, 'would you like to change the sea for land—a hut for a house, and, while you receive ten times the profit you expect, to rid yourself at the same time of the thousand ills of the tempestuous sea?' 'Aye, that I would,' I said. So they told me who they were, and promised me ten thousand drachmas, and that neither myself nor any of my crew should suffer injury, if I gave them an opportunity of taking my ship. It was then agreed that I should set sail in the night, but lie-to under the promontory; and that the pirates, who were at anchor on the other side, should then come out and seize my ship and cargo. As all this took place in a temple, I made them swear to fulfil their promises; and I agreed, on my part, to do as they wished. But instead of lying-to, I made sail for the open sea, and so escaped." "And this," observed Iarchas, "you think an act of justice?" "Yes," said Apollonius; "and of humanity; for to save the lives of my men, and the property of my employers, and to be above a bribe, though a sailor, I hold to be a proof of many virtues."

Iarchas smiled, and remarked: "You, Greeks, seem to think that not to do wrong is to be just. Only the other day, an Egyptian told us of the Roman proconsuls; how, without knowing the people, they entered their provinces with naked axes; and of the people, how they praised their governors if they only were not venal, just like slave-dealers who, to vaunt their wares, warrant that their Carians are not thieves! Your poets, too, scarcely allow you to be just and good. For Minos, the most cruel of men, and who with his fleets reduced his neighbours to slavery, they honour with the sceptre of justice, and as the judge of the dead. But Tantalus, a good man, who made his friends partakers of immortality, they deprive of food and drink."

And he pointed to a statue on the left inscribed "Tantalus." It was four cubits high, and of a man of about fifty, dressed in the Argolic fashion, with a Thessalian chlamys. He was drinking from a cup as large as would suffice for a thirsty man, and a pure draught bubbled up in it without overflowing.

Their conversation was here interrupted by the noise and tumult in the village occasioned by the king's arrival; and Iarchas angrily observed, "Had it been Phraotes, not the mysteries had been more quiet." Apollonius, seeing no preparations, inquired whether they intended offering the king a banquet? "Aye, and a rich one, for we have plenty of everything here," they said, "and he is a gross feeder. But we allow no animal food, only sweetmeats, roots, and fruits, such as India and the season afford. But here he comes." The king, glittering with gold and jewels, now approached. At this interview Damis was not present, for he spent the whole of this day in the village, but Apollonius gave him an account of it, and he wrote it in his diary. He says then that the king approached with outstretched hands as a suppliant, and that the sages from their seats nodded, as if granting his petition, at which he rejoiced greatly, as at the oracle of a god; but of his son and brother they took no more notice than of the slaves who accompanied him. Iarchas then rose and asked him if he would eat. The king assented, and four tripods, like those in Homer's Olympus, rolled themselves in, followed by bronze cup-bearers. The earth strewed itself with grass, softer than any couch; and sweets and bread, fruits and vegetables, all excellently well prepared, moved up and down in order before the guests. Of the tripods, two flowed with wine, two with water, hot and cold. The cups, each large enough for four thirsty souls, and the wine-coolers, were each of a single stone, and of a stone in Greece so precious, as to be set in rings and necklaces. The bronze cup-bearers poured out the wine and water in due proportions, as usual in drinking-bouts. They all lay down to the feast, the king with the rest, for no place of honour was assigned him.

In the course of the dinner Iarchas said to the king, "I pledge you the health of this man," pointing to Apollonius, and with his hand signifying that he was a just and divine man. On this the king observed, "I understand that he, and some others who have put up in the village, are friends of Phraotes." "You understand rightly," said Iarchas, "for even here he is Phraotes' guest." "But what are his pursuits?" asked the king. "Those of Phraotes," answered Iarchas. "Worthless guest worthless pursuits, they prevent even Phraotes from becoming a man indeed," said the king. "Speak more modestly

of philosophy and Phraotes," observed Iarchas,—“this language does not become your age.” Here Apollonius, through Iarchas, inquired of the king “what advantage he derived from not being a philosopher?” “That I possess all virtue, and am one with the sun;” answered the king. Apollonius: “You would not think thus if you were a philosopher.” The king: “Well, friend, as you are a philosopher, tell us what you think of yourself.” Apollonius: “That I am a good man, so long as I am a philosopher.” The king: “By the sun, you come here full of Phraotes.” Apollonius: “Thank heaven, then, that I have not travelled in vain; and if you could see Phraotes, you would say he was full of me; and indeed he wished to write to you about me, but when he told me that you were a good man, I bade him not take that trouble, for I had brought no letter to him.” When the king heard that Phraotes had spoken well of him, he was pacified, and forgot his suspicions; and in a gentle tone said: “Welcome, best friend.” “Welcome you,” said Apollonius, “you are like one just arrived.” “What brought you to this place?” asked the king. “The Gods and those wise men,” answered Apollonius. “But, stranger, what do the Greeks say of me?” inquired the king. “Just what you say of them,” said Apollonius. “But that is just nothing,” the king replied. “I will tell them so, and they will crown you at the Olympic games,” said Apollonius; then turning to Iarchas: “Let us leave this drunken fool to himself: but tell me why you pay no attention to his son and brother, and do not admit them to your table?” “Because,” answered Iarchas, “they may one day rule, and by slighting them we teach them not to slight others.” Apollonius then remarking that the number of the Sophoi was 18, observed to Iarchas that it was not a square number, nor indeed a number at all honoured or distinguished. Iarchas in answer, told him that they paid no attention to number, but esteemed virtue only; he added that the college, when his grandfather entered it, consisted of eighty-seven Sophoi, and that his grandfather then found himself its youngest, and eventually in the one hundred and thirtieth¹ year of his age its only surviving member; that no eligible candidate having in all that time offered himself for admission, he remained four years without a colleague; and that when he then received from the Egyptians congratulations on his alone occupying the seat of wisdom, he begged them not to reproach India with the small number of its wise men. Iarchas then went on to blame the Elians, in that as he had heard from the Egyptians, they

¹ Ibn Batuta speaks of Hindus 120, 130, and 140 years of age. Burnes of one at Cabul of 114, apparently with all his faculties about him.—II., 109.

elected the Olympic dikasts by lot, and thus left to chance what should be the reward of merit ; and that they always elected the same number,—never more, never less ; and that they thus sometimes excluded good men and sometimes were obliged to choose bad ones. Better, he said, it had been if the Elians had allowed the number of the dikasts to vary with circumstances, but had always required in them the same qualifications.

The king here rudely interrupted them, and expressed his dislike of the Greeks, and spoke of the Athenians as the slaves of Xerxes ; Apollonius, turning to him, asked if he had any slaves of his own ? “Twenty thousand,” he answered, “and born in my house!” “Well, then,” said Apollonius (always through Iarchas), “as they run away from you, not you from them, so Xerxes, conquered at Salamis, fled like a worthless slave from before the Athenians.” “But surely,” observed the king, “Xerxes, with his own hands set fire to Athens?” “Yes,” said Apollonius, “but how fearful was his punishment ! He became a fugitive before those whom he had hoped to destroy ; and in that flight was most unhappy, for had he died by the hands of the Greeks, what a tomb would they not have built for him—what games not instituted in his memory !—as knowing that they honoured themselves when they honoured those whom they had subdued.” On this the king burst into tears, and excused himself, and attributed his prejudices against the Greeks to the tales and falsehoods of Egyptian travellers, who, while they boasted of their nation as wise and holy, and author of those laws relating to sacrifices and mysteries which obtain in Greece, described the Greeks as men of unsound judgment, the scum of men, *συγκλυδας*, insolent and lawless, romancers, and miracle-mongers, poor, and parading their poverty—not as something honourable, but as an excuse for theft. But now, he went on to say, that I know them to be full of goodness and honour, I hold them as my friends, and as my friends praise them, and wish them all the good I can, and I will no longer give credit to these Egyptians. Iarchas here observed that he had long perceived that the Egyptians had got the ear of the king, but that he said nothing, waiting till the king should meet with such a counsellor as Apollonius. But now that you are better taught, let us, he said, drink together the loving-cup of Tantalus ; and then to sleep, for we have business to transact to-night. I will however, as occasion offers, indoctrinate you in Greek wisdom, the fullest in the world. And so stooping to the cup, he drank first,

¹ According to Megasthenes, *ειναι δε ε τοδε μεγα εν τη Ινδων γη παντας Ινδους ειναι ελευθερους*.—Arrian *Indica*. xi. ουδε Ινδοις αλλος δουλος εστι. Onesicritus limits this to the subjects of Musicanus.—Strabo, *ut sup.*, § 54.

and then handed it to the other guests ; and there was enough for all, for it bubbled up as if from a fountain.

They lay down to rest, and at midnight they rose, and aloft in the air hymned the praises of the sun's ray; the Sophoi then gave private audience to the king. Next morning early, after the sacred rites, the king having vainly pressed Apollonius to visit him retired to the village ; for by law he could not remain more than one day at the college. The Sophoi now sent for Damis, whom they admitted as a guest. The conversation then commenced, and Iarchas discoursed on the world ; how it is composed of five elements—water, fire, air, earth, and æther ; and how they are all co-ordinate, but that from æther the Gods, from air mortals, are generated ; how moreover the world is an animal, and hermaphrodite ; and how as hermaphrodite it reproduces by itself and of itself all creatures ; and how as intelligent it provides for their wants, and with scorching heats punishes their wrong-doing. And this world Iarchas further likened to one of those Egyptian ships¹ which navigate the Red Sea. By an old law, no galley is allowed there ; but only vessels round fore and aft (*στρογγυλοι*), fitted for trade. Well, these vessels the Egyptians have enlarged by building up their sides, and fitting them with several decks ; and they have manned them with pilots at the prow ; seamen for the masts and sails ; and marines, as a guard against the barbarians ; and over and above them all, one pilot, who rules and directs the rest. So, in the world, there is the first God, its creator ; next him, the gods who rule its several parts—sung by the poets, as gods of rivers, groves, and streams ; gods above the earth, and gods under the earth ; and, perchance too there is below the earth, but distinct from it, a place terrible and deadly." Here, unable to contain himself, Damis cried out, in admiration : " Never could I have believed that any Indian was so thoroughly conversant with the Greek language, and could speak it with such fluency and eloquence !"

A messenger now announced and introduced several Indian supplicants—a child possessed, a lame and blind man, &c.,—all of whom were cured.

¹ Megasthenes (*Strabo, ut supra*, § 59) gives pretty nearly the same account of the Brahmanical doctrines, that the world has a beginning, and will have an end ; that God, its ruler and creator, pervades it ; that besides the four elements there is a fifth, æther ; and Alexander Polyhistor asserts that Pythagoras was a disciple of the Brahmins ; *Frsg. Hist.*, III. § 138, p. 239, and p. 241 mentions æther as one of the Pythagorean elements.

² The boat among the Hindus is one of the types of the earth.—*Wilford As. Res.*, viii. 274 ; Von Bohlen quotes this passage to prove that the Hindus had the knowledge of one God.—*Das Alte Indien*, i. 152.

Iarchas further initiated Apollonius, but not Damis, in astrology and divination, and in those sacrifices and invocations in which the gods delight. He spoke of the divining power, as raising a man to an equality with the Delphian Apollo, and as requiring a pure heart and a stainless life, and as therefore readily apprehensible by the ætherial soul of Apollonius. He extolled it as a source of immense good to mankind, and referred to it the physician's art—for was not *Æsculapius* the son of Apollo? and was it not through his oracles that he discovered the several remedies for diseases, herbs for wounds, &c.?

Then turning, in a pleasant way, to Damis,—“And you, Assyrian,” he said, “do you never foresee anything—you, the companion of such a man?” “Yes, by Jove,” answered Damis, “matters that concern myself; for when I first met with this Apollonius, he seemed to me a man full of wisdom and gravity and modesty and patience; and when I saw his memory and great learning and love of learning, I looked upon him as a sort of *Dæmon*; and I thought if I kept with him, that instead of a simple and ignorant man, I should be thought wise,—learned, instead of a barbarian; and that if I followed him and studied with him, I should see the Indians, and see you; and that through his means I should mix with the Greeks, a Greek. As to you then you are occupied with great things, and think Delphi and Dodona or what you will. As for me, when Damis predicts, he predicts for himself only, like an old witch.” At these words all the *Sophoi* laughed.

Apollonius inquired about the *Martichora*¹, an animal the size of a lion, four-footed, with the head of man, its tail long with thorns for hairs, which it shoots out at those who pursue it;—about the golden fountain² too; and the men who use their feet for umbrellas, the *sciapods*³. Of the golden fountain and *Martichora*, Iarchas had never heard; but he told Apollonius of the *Pentarba*, and showed him the stone and its effects. It is a wonderful gem, about the size of a man's thumb-nail, and is found in the earth at a depth of four fathoms; but though it makes the ground to swell and crack, it can only be got at by the use of certain ceremonies and incantations. It is of a fiery colour and of extraordinary brilliancy, and of such power, that thrown into a stream it draws to it and clusters round it all precious stones

¹ Ctesias, p. 80, § 7; Didot.

² Id., p. 73. § 4. Wilson, Notes on Ctesias, explains and accounts for these myths.

³ Id., § 104 and 84. Among the people of India, from Hindu authority quoted by Wilford, are the *Ecapada*, one-footed. “*Monosceli singulis cruribus, eodemque Eciapodus vocari*,” from Pliny (ib.) From Wilson's Notes, the one-footed and the *Sciapods* should be two different races.

within a certain considerable range¹. The pigmies, he said, lived on the other side of the Ganges and under ground; but the Sciapods and Longheads were mere inventions of Scylax. He described also the gold-digging griffins; that they were sacred to the Sun (his chariot is represented as drawn by them²), about the size of lions³, but stronger because winged; that their wings were a reddish membrane, and hence their flight was low and spiral; that they overpowered lions, elephants, and dragons; and that the tiger alone, because of his swiftness, was their equal in fight. He told of the Phoenix, the one of his kind, born of the sun's rays, and shining with gold, and that his 500 years of life were spent in India; and he confirmed the Egyptian account of this bird—that singing his own dirge he consumed himself in his aromatic nest, at the fountains of the Nile. Similarly also swans, it is said, sing themselves to death, and have been heard by those who are very quick of ear.

They remained four months with the Sophoi; and Iarchas gave Apollonius seven rings, named after the seven planets, which he ever afterwards wore, each in its turn, on its name-day. When they took their departure, the Sophoi provided them with camels and a guide, and accompanied them on the road; and, prophesying that Apollonius would even during his life attain the honours of divinity, they took leave of him; and many times looking back, as in grief at parting with such a man, returned to their college. And Apollonius and his companions, with the Ganges on their right, the Hyphasis on their left (*sic*), travelled down towards the sea-coast, *a ten days' journey*, and on their road they saw many birds and wild oxen, asses and lions, panthers and tigers, and a species of ape different from those that frequent the pepper-groves, for they were black, hairy, and dog-faced, and like little men. And so conversing, as their custom was, of what they saw, they reached the coast, where they found a small factory, and passage-boats of a Tuscan build, and the sea of a very dark colour. Here Apollonius sent back the camels, with this letter to Iarchas:—

¹ Strabo from Megasthenes, *ib.*, § 56. Ctesias also mentions them.

² In the Vishnu Purana: "The seven horses of the sun's car are the metres of the Vedas," p. 218. Sculptured or painted horses always.

³ Ctesias, p. 82, § 12, and p. 95, § 70. Wilson (*Ariana Antiqua*) has shown from the Mahabharata, that this story has an Indian foundation. "Those tribes between Meru and Mandura verily presented in lumps of a drona weight, that gold which is dug up by Pippilikas (ants), and which is therefore called 'Pippilika ant-gold,'" (p. 135, note); and see *A Journey to Lake Mánasaróvara*, by Moorcroft, who speaks of a sort of marmot in the gold country which Schwanbeck supposes to be the original of this ant.—*As. Res.*, xii. 442.

"To Iarchas and the other Sophoi from Apollonius, greeting: I came to you by land; through you I can now return by sea. You have communicated to me your wisdom, and through you I can now walk the air. I shall not forget these things even among the Greeks, unless, indeed, I have vainly drunk of the cup of Tantalus. Farewell, ye best philosophers."

Apollonius then embarked, and set sail with a fair and gentle breeze. He admired the Hyphasis, which at its mouth narrow and rocky hurries, through beetling cliffs, into the sea, with some danger to those who hug the land. He saw too the mouth of the Indus, and Patala, a city built on an island formed by the Indus, where Alexander collected his fleet. And Damis confirms what Orthagoras has related of the Red Sea—that the Great Bear is not there visible; that at noon there is no shadow; and that the stars hold a different position in the heavens.

He speaks of Byblus with its large mussels, and of Pagala of the Oritæ where the rocks and the sands are of copper; of the Ichthyophagi and their city Stobera, where the people clothe themselves in fish-skins, and feed their cattle on fish; of the Carman, an Indian race and civilized, who of the fish they catch keep only what they can eat, and throw the rest, living, back into the sea; and of Balara, where they anchored, a mart for myrrh and palms. He tells too of the mode in which the people get their pearls. In this sea, which is very deep, the oyster of a white shell is fat, but naturally produces no pearls. When however the weather is very calm and the sea smooth, and made still smoother by pouring oil upon it, the Indian diver, equipped as a sponge-cutter, with the addition of an iron plate and a box of myrrh, goes down to hunt for oysters. As soon as he has found one, he seats himself beside it, and with his myrrh stupefies it and makes it open its shell. The moment it does this, he strikes it with a skewer, and receives on his iron plate cut into shapes the ichor which is discharged from its wound. In these shapes the ichor hardens, and the pearls thus made differ in nothing from real pearl.¹ This sea, he adds, is full of monsters, from which the sailors protect themselves by bells at the poop and prow. Thus sailing, they at last reach the Euphrates, and so up to Babylon, and again meet Bardanes.

In reviewing this account of India, our first enquiry is into the authority on which it rests. Damis was the companion of Apollonius,

¹ Is this an indistinct and garbled account of the Chinese mode of making pearls described in a late *Journal of the Society*?

so Philostratus and not improbably public rumour affirmed. Damis wrote a journal, and, though no scholar, was according to Philostratus as capable as any man of correctly noting down what he saw and heard¹. But Damis died, and his journal, if journal he kept, lay buried with him for upwards of a century, till one of his family presented it to the Empress Julia Domna, the wife of Severus, curious in such matters—But in what state?—untouched?—with no additions to suit the Empress's taste? Who shall tell? Again, the Empress did not order this journal to be published, but gave it to Philostratus, a sophist and a rhetorician, with instructions to re-write and edit it; and so re-written and edited he at length published it, but not till after the death of his patroness, the Empress. Weighing then these circumstances, all open to grave suspicion, every one must admit that the journal of Damis gives no authority to Philostratus's work; but that this last, and more especially the books which relate to India, may give authority to the journal and history. By their contents then they must be judged.

That Apollonius should pay little attention to, and not very accurately describe, external objects, might be expected. One can understand that, occupied with the soul and the gods, he should toil up the Hindu-kush without one remark on its snow-covered peaks—one plaint on the difficulties and dangers of its ascent². But how explain these lengthy descriptions of animals and natural wonders that never had existence? If you put forward Damis—of the earth, earthly—an eager and credulous listener, you have still to show how it is, that these descriptions so exactly tally with those of Ctesias and the historians of Alexander; how it is they are never original, except to add to our list of errors, or to exaggerate errors already existing. Thus, on Caucasus, more fortunate than the soldiers of Alexander, he not only hears of Prometheus, but sees his chains. He climbs Mount Nysa, and has to tell of Bacchus and his orgies,—now no longer the inventions of flattery as Eratosthenes so shrewdly suspected,—for did not Damis there find his temple and his statue?—In general terms Seleucus Nicator and Onesicritus had vaunted the long life of elephants; but in Taxila, Damis admired the elephant of Porus, and on its golden bracelets read its name and age. Copying Ctesias, he speaks of the

¹ Διατριβὴν ἀναγραφῆαι, ἃ δὲ γὰρ ἤκουσεν ἡ εἰδὲν ἀνατυπῶσαι—σφοδρὰ ἱκανὸς ἦν, ἃ ἐπετίθει τοῦτο ἀρίστα ἀνθρώπων.—I., c. 19.

² Dangers which not even Hiouen-Thsang was indifferent to; but Apollonius's indifference we may account for by an observation of Cicero: "In India, qui sapientes habentur, nudi ætatem agunt, et Caucasæ nives hyemaleque vim perferunt sine dolore."—Tusc. Quæst., L. v.

Indus, forty stadia broad where narrowest¹; of giant Indians, five cubits high; of worms, with an inextinguishable oil; of winged griffins, but instead of large as wolves, he makes them large as lions; and of the swift one-horned ass, and the jewel Pantarbas, both of which he and Apollonius saw. Similarly of two serpents or dragons, 80 and 140 cubits respectively, pets of Aposeisares, Onesicritus had heard, but Damis was present at a dragon-hunt, and had seen dragons' heads hanging as trophies in the streets of Paraka. Surely such information, not put forward as mere reports, but solemnly vouched for, can never have come from a man who has really visited India, or they came from one of as little authority as Mendez Pinto, when he gives an account of his expedition to and a description of the imperial tombs of China.

But, it will be said, these wonders were the common stock in trade of Indian travellers; every man believed in them, and every man who went to India and wrote of India, was ashamed of not seeing at least as much as his predecessors. Leaving then these common-places, examine Damis where he is original, or nearly so. To him we owe the porphyry temple and the metal mosaics at Taxila; to him, that spur of Caucasus, stretching down from the Indian side of the Hyphasis to the Indian Ocean; to him, its pepper-forests, and its monkeys, so useful in gathering the pepper-harvests. Through him we know of the groves sacred to Venus, and the unguent so necessary to an Indian marriage. He alone tells of the wondrous hill; its crater-fire of pardon, its rain-cask, and its brimming-cup of Tantalus; and though of casks of the winds, and of self-acting tripods, Homer had already written; and though of a well of the test, Ctesias had vaguely heard, and its qualities Bardasanes had described, to Damis belongs this merit, he gave them local habitation, made them facts. With the Sophoi he lived four months in closest intimacy, and yet from his description of them, who shall say, who and what they were? To the powers he ascribes to them both Buddhists and Brahmans pretend. But while their mode of election, determined by ancestral and personal character, points them out as Buddhists, their name, their long hair, their worship of the sun, declare them Brahmans². But Buddhist or Brahman, at their feet after a long and weary travel Apollonius sits a disciple, and they instruct him—in doctrines and

¹ Philostratus scarcely so strong, *το γὰρ πλωμιον αὐτου τοσουτον*, its breadth at the ferry where people usually cross.—II., 17 and 18.

² Bardasanes, who knew of Brahmans and Buddhists only from report, has given a very clear and intelligible account of both. I have already referred to it.—Porphyry, iv. 17.

opinions which were current at Athens. In the very heart of India he finds its sages, though "inland far they be," well acquainted with Greek geography and the navigation of the Grecian seas, worshipping Greek gods, speaking Greek, thinking Greek,—more Greek than Indian. Absurd and impossible as this description seems to us, our Damis, if I judge him rightly, was not the man to advance what the Greek mind was wholly unprepared to receive. Accordingly, long ago Clitarchus and the historians of Alexander, had announced an Indo-Greek Bacchus; to him, Megasthenes added a Hercules; and, more recently, Plutarch had proclaimed, I know not on what authority, that the Indians were worshippers of the Greek gods¹. Vague rumours of such a worship were not improbably current; and Damis's journal merely confirmed them. Similarly, Nicolaus Damascenus² first mentioned the Greek language in connexion with India. He states, that when at Antioch Epidaphne (20 B.C.), he met with some Indian ambassadors on their way to Augustus Cæsar. They were three in number whom he saw, and had originally been more, as their letters showed, but the greater part had perished on the road. Their letter of credence was on parchment, and written in the name of Porus, and in Greek. It declared that Porus, though lord over 600 kings, much valued the friendship of Augustus, and was ready to open his kingdom to him and his people, and give him and them all due assistance. Such was the tenor of the letter. The presents accompanying it were in the charge of eight naked slaves in girdles well anointed, and consisted of a youth whose arms, when he was a child, had been cut off at the shoulders³—a sort of Hermes, whom Strabo himself saw—some vipers, a snake ten cubits long, a river tortoise of four cubits, and a partridge somewhat larger than a vulture. Among the ambassadors was that Indian who burned himself at Athens, not as some do, to escape from present evils, but because having hitherto succeeded in every thing, he feared lest any longer life should bring him misery and disappointment; and so, joyous and well-anointed, he leaped into the burning pile. This inscription is on his tomb:—"Here lies Zarmamos Chegan⁴, of Bargosa, who, according to his country's custom, gave himself immortality." Plutarch (end of the 1st century) though

¹ *Vide supra*, note 4, in page 88.

² *Frag. Hist.*, § 91, p. 419.

³ The words are: *εἶναι δὲ τὰ δῶρα τὸν τε Ἑρμῆν ἀπὸ τῶν ὤμων ἀφηρημένον ἐκ ἡπικίου τοῦ βραχίονος, ὃν ἡ ἡμεῖς εἶδομεν*. Lassen has translated this a statue of Hermes, the arms of which had been broken off at the shoulders by a boy. To say nothing of the harshness of construction which such a translation would imply, a passage from Dio Cassius speaks of this Hermes as a youth.

⁴ *Çramana Karja*, teacher of the *Çramans*.—Lassen, iii. 60.

he does not name the Indians in enumerating the great deeds of Alexander, narrates that by his means Asia was civilised and Homer read there, and that the children¹ of Persians, Susians, and Gedrosians sang the tragedies of Euripides and Sophocles. Dio Chrysostom², (contemporary with Plutarch, and a friend of Apollonius), in a panegyric upon Homer, insists upon his wide-spread reputation; that he lived in the memory, not only of Greeks, but of many of the barbarians; "for his poems, it is said, are sung by the Indians, who have translated them into their own language; so that a people who do not contemplate the same stars as ourselves,—in whose heaven our polar star is not visible,—are not unacquainted with the grief of Priam, and the tears and wailings of Hecuba and Andromache, and the courage of Achilles and Hector." Ælianus, of about the same age as Philostratus, tells us that not only the Indians, but the kings of Persia also, have translated and sung the poems of Homer, if one can credit those who write on these matters³. On such vague authority, coupled doubtless with the fact that an Indo-Greek kingdom had formerly existed, and had at one time extended to the Jumna, and that barbaric kings so honoured Greece, that on their coins they entitled themselves Philhellene⁴, Damis built up this part of his romance, which flattered Greek prejudices and soothed Greek vanity, and was willingly received by that influential and educated class to whom it was addressed, and who were struggling to give new life and energy to the perishing religion of Greece.

Of Damis's geography, I can only say that it reminds me of a fairy tale. As soon as he leaves the well-known scene of Alexander's exploits, he crosses mountains unknown to any map, and then describes an immense plain of fifteen days' journey to the Ganges, and eighteen days to the Red Sea, but which he himself travels over in fourteen days; for in four days he reaches the hill of the Sophoi, and thence, in ten days, arrives at the one mouth of the Hyphasis. Who shall explain these discrepancies, account for these mistakes, and fix localities thus vaguely described?

Reviewing the whole work of Philostratus, it seems to me that Apollonius certainly pretended to have travelled through, and made some stay in India, but that very possibly he did not really visit it; and that if he did visit it, our Damis never accompanied him; but, if we may judge from the cinnamon and pepper-trees, the mangosteen, the

¹ Καὶ Περσῶν ἔξ Σουσιανῶν ἔξ Γεδρωσιῶν παῖδες τὰς Εὐριπίδου ἔξ Σοφοκλέους τραγωδίας ᾗδον, *ut supra*.

² De Homero Oratio, LIII., 277; p. II. Reiske.

³ Varise Hist., L. xii., c. 48.

⁴ Bayer Reg. Græc. Bactriani Hist., p. 117.

trade in pearls, and the frequent reference to Egypt and Egyptian travellers, fabricated this journal perhaps from books written upon India, and tales¹ current about India, which he easily collected at that great mart for Indian commodities, and resort for Indian merchants—Alexandria.

¹ Traceable to the same sources as those from which Dio Chrysostom obtained his stories about India. In his oration to the people of Alexandria, he speaks of Bactrians, Scythians, Persians, and a few Indians (Ινδων τινας), as frequenting their city (Ib. I, p. 672); and as authority for his Indian tale to the Celæni, he gives: *τινες των αφικνουμενων εφασαν· αφικνουνται δε ου πολλοι τινες εμποριας ενεκεν. ουτοι δι επιμ. γυννται τοις προς θαλαττη· τουτο δε ατιμον εσται Ινδων το γενοσ, οι τι αλλοι ψεγουσιν αυτους.*—II., 72, p. 3.

ART. IV.—*Summary Review of the Travels of Hiouen Thsang*¹,
from the Translation of the *Si-yu-ki* by M. JULIEN, and
the *Mémoire Analytique* of M. VIVIEN DE ST. MARTIN. By
Professor H. H. WILSON, Director of the Society.

[Read 8th and 22nd January, and 5th February, 1859.]

IN an appendix to the publication of the translation of the Travels of *Fa Hian*, the *Foe Koue Ki*, was added an itinerary professing to be that of another Chinese traveller, *Hiouen Thsang*, who visited India in the first half of the seventh century. As it was an extract from a geographical Encyclopædia of comparatively recent compilation, some doubt was suggested as to the degree of confidence to which it was entitled, although enough of interest was obviously attached to the account, and it was most desirable that we should have access to the original through the medium of a translation into some familiar idiom. The eyes of European scholars were naturally directed to the most eminent of sinologues, M. Stanislas Julien, who, in compliance with their wishes, undertook and has now completed the task. Some notice of the result of his labours will be, no doubt, acceptable to the Royal Asiatic Society, although the limited space that is compatible with the extent of the Journal compels me to a more summary review than a careful and minute analysis would require.

It appears, however, that no account of his travels written by himself was ever prepared by *Hiouen Thsang*. M. Julien has translated two works relating to these travels, but neither is the performance of *Hiouen Thsang* himself. The first is a biographical notice of him, in which his travels form a principal feature: this was composed by two of his scholars, *Hoei-li* and *Tsang-yan*, and published

¹ I have retained, in regard to the name of the traveller, the spelling of M. Julien, *Hiouen Thsang*, although, in following the French pronunciation, it is necessary to render *ou* by *u* or *oo*; preferring the former, the first name should be written therefore *Anglice*, *Hiuen*, or perhaps even *Huen* if it be a monosyllable, as English sinologues write *Foe-koue-ki*, "*Foe-kwo-ki*." I have thought it right, however, to leave the name as it is written in French, as likely to be more generally known under that form; in all other instances I have represented *ou* by *u*, as in the frequently recurring term *Poulo*, "*Pulo*," from the Sanskrit *Pura*, "a city." I have also made a few other necessary adaptations, as *ch* for *ich*, and *sh* for *ch*, as in *Kua-cheu* for *Koua-tcheou*, and *Sha-cheu* for *Cha-tcheou*, and some others of obvious necessity, with reference to French and English pronunciation.

by M. Julien, in 1853, under the title of "Histoire de la Vie de Hiouen-Thsang, et de ses Voyages dans l'Inde depuis l'an 629 jusqu'en 645." The second, which is the work just finished, is entitled the "Si-yu-ki ; or, Mémoires sur les Contrées Occidentales," which is described by the translator as "the compilation by an eminent writer of the name of Pien-ki, with the assistance of numerous documents translated from the Sanskrit by the illustrious traveller, and derived for the most part from statistical and historical works composed in those days in India, and no longer extant." So that, in the catalogue of the library of the Emperor Khien-long, it is said to be a translation from the Sanskrit—a designation not altogether correct, although it may convey the notion entertained by Chinese scholars of the sources whence the materials of the Si-yu-ki were drawn : at any rate, the work abounds with Sanskrit terms, the names of places and persons, and the expression of Buddhist doctrines sometimes disguised in Chinese characters, sometimes translated. The deciphering and interpretation of these words has added, in no slight degree, to the difficulty of the translator, and has imposed upon M. Julien the necessity of making himself sufficiently acquainted with Sanskrit to be able to verify the original terms. This he has accomplished with singular success, and has furnished, as a supplement to his translation, three several indices—one of Sanskrit and Chinese words, one of Chinese and Sanskrit words, and one of Sanskrit words expressed phonetically in Chinese—all of which, besides affording a proof of his conscientious industry, cannot fail to be of most essential service to any scholars who may hereafter investigate the past history and faith of India from Chinese sources.

The account given of the Si-yu-ki in the catalogue of Khien-long is far from affording a precise notion of the work ; but this is of no great importance, as we have itself to refer to. It is evidently made up of two parts : first, a description of the countries visited, or respecting which information was gathered by the traveller ; secondly, a *résumé* of his itinerary : the first is probably in his own words ; the second must be taken from his journals ; but it is in the language of the editor, of Pien-ki, it is to be supposed, by whom the compilation was effected. Thus we find the work begins with an account of a country named O-ki-ni, the Chinese representative of the Sanskrit Agni. Thus : "The kingdom of O-ki-ni has about 600 li from east to west, and 400 from north to south. On all four sides it is enclosed by mountains ; the roads are dangerous, and easy of defence ; a multitude of streams, which unite, surround it like a girdle ; their water is employed in irrigation ; the soil is favourable to red millet, late

wheat, fragrant jujubes, grapes, pears, and plums," and so on to the end of the description ; when the itinerary begins in these terms :—

"Departing from this country, he made about 200 li to the south-west, cleared a small mountain, and crossed two large rivers ; to the west he found a narrow valley. After having made (*après avoir fait*) about 700 li, he arrived at the kingdom of Kiu-chi." After which the language of description is resumed ; then we again have the itinerary in the same style. "After quitting this country he made about 600 li west, crossed a small sandy desert, and arrived at the kingdom of Pa-lu-kia." Then again follows description ; the description, mixed up with legends and anecdotes, is no doubt the writing of Hiouen Thsang ; but the itinerary in which he is spoken of only as "*He*," is of course the work of the redacteur Pien-ki, and is possibly less detailed, and so far less serviceable than the original. Whatever may be its defects, however, they are remedied by a very carefully elaborated analysis of Hiouen Thsang's travels, by M. Vivien de St. Martin, according to both the biographical memoir and the Si-yu-ki, in which he has followed the route of the traveller, and traced his course with all the precision that was practicable ; collecting, in illustration, a variety of interesting notices from Chinese and Arabian geographers.¹ According to these authorities, then, Hiouen Thsang commenced his travels A.D. 629 from Liang-chen, a commercial city in the north-west of China, from which he proceeded to Kua-chen, beyond the western extremity of the Great Wall ; both this place and Liang-chen are still extant, and bear the same appellations. After crossing the river Hu-lu (the Bulunghir of the Mongols), he came to the desert known to the Chinese as Sha-ho (the Mongol Gobi), or the "River of Sand." Hiouen Thsang calls it Mo-kia-yeu, which is evidently the Chinese representation of the name it still bears among some of the Mongols—Ma-kha-i. Along the route were Chinese watch-towers at the distance of 100 li from each other, the last placed on the Chinese frontier, at 500 li from the river. M. de St. Martin has prefaced his

¹ Something of this had been effected by the translators of the Foe-Kue-Ki, and by M. Reinaud, with the assistance, as he acknowledges, of M. Julien, in his *Mémoire Géographique Historique et Scientifique de l'Inde* ; but the former verifications are not always correct, and the latter are of limited extent. A more copious verification of Hiouen Thsang's route, as laid down in the appendix to Fa-hian's, was published by Captain Cunningham in the *Journal of the Asiatic Society of Bengal*, vol. xvii., containing much accurate and valuable illustration, to which M. St. Martin makes frequent reference. M. St. Martin has, of course, for the basis of his identifications, the results of M. Julien's scholarship in both Chinese and Sanskrit, and the complete and systematic concurrence he has been able to establish between the nomenclature of both languages.

analysis by a determination of the value of the li in the days of the traveller, and fixes it at 329 metres, which are equal to 3,281 feet. An English mile, therefore, contains 4 li and 8-10ths; or we may say roughly, that 5 li make a mile. The distances specified by Hiouen Thsang could not have been the result of actual measurement, and must be taken at best as approximations from his own estimates and collateral information.

On leaving China the route enters the kingdom of I-gu, with a capital of the same name, now known as Hami, the capital of the Eigur Turks, who, under the Chinese designation of Hoei-hu, occupied those countries from the second century before our era, according to the Chinese annals.

The next country is that of the king of the Kao-chang, another Eigur tribe, who, a few years subsequently, conquered the I-gu country, and gave their name to the whole of the Eigur tribes. The capital was Pe-li at the time of the journey (or the Chinese Pi-jan), about 75 leagues from Hami. Thence Hiouen Thsang goes west to Vu-pu-an, and thence to To-tsin, which M. de St. Martin considers to be the same as the still existing city Toksún, about 190 li south, or 38 miles, south-west from Turfan.

From this place Hiouen Thsang comes to the kingdom of Akini or Okini, which M. de St. Martin says is indisputably, from the bearing and distance, the modern Kara-shahr. Akini, M. Julien considers, may be identical with Agni. M. de St. Martin suggests its being possibly a modification of the ancient Chinese name Yenki. We should scarcely expect to meet with Agni so far to the north-east unless the term were used by Hiouen Thsang with some little inaccuracy, to denote the bearing of his route; Agni designating the south-east, his course lying to the south-west. It is rather remarkable, however, that the traveller states that the written characters are borrowed from India with very slight modifications; but this may be accounted for by the presence of some ten Buddhist convents, the members of which, 2000 in number, learn their doctrines and institutions from books brought from India. The country is of no great extent, or about 600 li (120 miles) from east to west, and 400 li (80 miles) from north to south. It is a table land shut in by mountains.

Two hundred li from hence Hiouen Thsang passed two great rivers; and at 700 li further—altogether 180 miles,—he came to the kingdom of Ki-u-chi or Ku-ché. The country on the west of Kara Shahar is still called Ku-che. According to the traveller's account of it, it is rich in mines of gold, copper, iron, and lead: we have here

about 100 convents, with 5000 members, whose writings, doctrines, and books are all from India. Statues of Buddha, some of them of colossal size, and impressions of his feet on blocks of jade are also met with.

From hence 600 li (120 miles) bring him to Po-lu-kia. The kingdom, according to M. de St. Martin, is represented by the present province of Ak-su; but he thinks the name of Po-lu-kia may be referred to a tribe of Turks who, before the Thang dynasty, ruled in the north-western extremity of China, named Pu-lo-ki. North from hence about twenty leagues occurred lofty mountains covered with snow—the Musur-aola of the Mongols, and Ling-shan of the Chinese—both meaning “Mountains of Ice:” a difficult journey of about eighty miles lay across these mountains, on which, it is stated, that no traveller should wear red garments, nor carry gourds—probably as water-bottles,—nor talk loud, under the penalty of bringing on a violent hurricane, by which he will probably be overwhelmed. At the end of this distance a large lake 1000 li (200 miles) in circuit presents itself. The description of this, which Hiouen Thsang calls Thsing-chi, leaves no doubt of its identity with the Lake Temurtu or Issikul.

The journey westward from the lake of Issikul presents, as noticed by M. de St. Martin, some important variations from the account given of it in the “*Mémoires de la Vie*,” which he ascribes to the employment of additional materials from Hiouen Thsang’s notes by his biographer. Both descriptions, however, are unsatisfactory as to the intermediate stages between the lake and the city of Ta-lu-se, and the total distance of about 1000 li, which, according to M. de St. Martin, leaves *une lacune considerable*. The two extreme points are, however, unquestionable; and the city of Ta-lu-se is recognisable in the important and ancient city of Talas or Taras, in the middle of the valley of the Jaxartes. Some of the difficulty of a more exact adjustment of the stages may arise from the repetition and confounding of names which are given to different places upon the authority of Chinese geographers. From Taras forwards, valuable elucidation is derivable from Arabic and Persian sources.

Taras, which Rashid-ud-din mentions is called Talas by the Turks, is the modern city of Turkestan. From thence Hiouen Thsang turned from west to south, following the valley of the Sir-darya, or Jaxartes. The stages given are Peshui, 200 li (40 miles), Kong-yu, the same, Nuchi-kien, 50 li (10), Che-chi, 40 miles towards the west, Fei-han, 1000 li or 200 miles: all these are identifiable. Pe-shui means “White Water,”—the translation of Safid-ab—a city named by Ibn

Hakal and Shahab-ud-din; it is placed at two or three day's journey from Taras, either of which will agree well enough with the 40 miles of the Chinese pilgrim.

Kong-yu does not find a representative, unless it be one of the cities termed Yenghi, "New Town," of which there is one much in the position required.

Nu-chi-kien corresponds with a Nuj-keth or Nuj-kand, of Turkish geography, but its exact position is not determined. This is not the case with Che-chi, the Turk and Bukharian Shash, Chach, or Cháj—the Tashkand of modern maps. The identity of Fei-han with Farghana, has been some time recognised, being intimated by Klaproth and Remusat, and the name also occurring as Pha-han-na, Pholona, Pho-han. The name, as given by Hiouen Thsang, designates the country; he does not notice the capital, and in fact he intimates that there was none, as for many years past every petty chief in the country had made himself independent. In the 10th century, Aksikhet, on the right bank of the Si-hun, was the capital, about seventy-two leagues south-east from Tashkand. The 1000 li of the itinerary are equal to seventy-four leagues,—a sufficiently near approximation.

Hiouen Thsang's next country is called by him Su-tu-li-se-na, the direction and proximate distance of which apply to a tract known to the early Mohammedans as Osrushna and Satrushna, but now designated Uratipa, or Uratupa, Uratepe, or Urtappa. Baber, in his memoirs, expressly states that the former name of the country was Usrushna, or, in the translation, Ustrushta. From hence, at 500 li south, the pilgrim comes to Sa-mo-kien, the identity of which with Samarkand does not admit of question, the bearing and distance agreeing sufficiently well with its position. Hiouen Thsang describes the city as a place of valuable trade, and the country as rich and productive, abounding in magnificent trees, fruits, and flowers, and producing an excellent breed of horses.

Without pretending to have visited the countries themselves, Hiouen Thsang makes mention of various places in the neighbourhood of Samarkand; some of these are not easily identifiable, but in Pu-ho or Pu-kho, M. de St. Martin recognises Bokhara, in Ho-li-si-me-kia Khwarizm, and in the river Po-tsu the Vankshu of Badakhshan, or the Oxus.

Setting out from Samarkand, the traveller proceeds to the south-west, above 300 li or 60 miles to Kie-shang-na or Kesa, the birth-place of Timur. From hence the route lay through difficult mountain passes to a gorge called "the Iron Gates," the Darband of the Mohammedans; passing which the traveller reached the kingdom of Tu-ho-lo,

Tokharistan, occupied at this period, by the Ye-tha or Yue-chi, a tribe of Tibetan origin that invaded Transoxiana, and overturned the Græco-Bactrian kingdom about B.C. 126., and, under their celebrated sovereign Kanishka, had spread into the Punjab shortly before our era. When visited by Hiouen Thsang, they had been driven southwards by the Turks, and had become tributaries of the Grand Khan divided into twenty-seven petty and feeble principalities.

After crossing the Oxus to Tami or Termez, the traveller came to the territory of Hu-o, which M. de St. Martin considers identical with Ghaur; but from hence he was called back to Po-ho-lo or Balkh. Between these two points he enumerates several states, some of which are easily verifiable, as Po-kia-lang, or Baghelan, He-lu-si-mur-kien, Semenghan, and Ho-lin or Khulm. Of Balkh, he says that "it is strongly fortified, but of limited extent and scanty population." In all these he reports the existence of Buddhist monasteries. Balkh contains 100, and 3000 occupants. At one of them, south-east of the town, were sundry precious relics—as the wash-hand basin of Buddha, one of his teeth, and his broom, the latter set with precious stones. North of the monastery was a sthūpa 200 feet high. There were others in that part of the country.

During his residence at Balkh, Hiouen Thsang received invitations from several of the neighbouring princes, and visited them in consequence, giving short descriptions of their principalities. The most remote was Ta-la-kien, or Talekan, on the confines of Po-la-se or Persia. The particulars of these journeys are apparently undetailed, as the itinerary is resumed from Balkh; from whence, at a distance of 900 li (180 miles) to the south, he comes to Fan-yen-na, an extensive city in a valley surrounded by mountains, and remarkable for colossal statues of Buddha cut in the rock, and still extant in fact at Bamian. In the neighbourhood of the city were various religious establishments, with relics and marvels which it is not material to particularise. We may notice one—the garment of a saint named Sanaka-Vasa, or the "Hemp-clad," from the *san*, of which his garment was manufactured. The saint wore it through 500 successive existences; and, on the occasion of his last birth, he was born with it. It grew as he grew; and, when he obtained Nirvána, he expressed a pious wish that it might endure as long as the law of Buddha. Hiouen Thsang remarks it was somewhat the worse for wear.

Going eastwards, through passes in the snowy mountains, the route comes to the kingdom of Kia-pi-shi, or Kapisa,—a name with which Pliny and Ptolemy have made us familiar as "*Kapissam urbem quam Kapisene habuit*," or, as sometimes read, Caphusa or Caphisa.

It is somewhat singular that with this positive indication of a city and state among the Paropamisadan mountains in the beginning of the Christian era, and its actual recognition by the Chinese traveller in the 7th century, the name should not occur in any Hindu authority. The word *Kapisa* is Sanskrit, meaning "brown," or "tawny," but we do not find it applied to any known locality. The position of *Kia-pi-shi*, although not determinable with precision, is evidently to the north-east of *Kabul*, and *M. de St. Martin* has good reason for placing it west of *Lamghan*, and, consequently, as corresponding with the districts of *Nijrao* and *Panjshir*,—a tract which, as he observes, although close to *Kabul*, is yet very imperfectly known. If *Hiouen Thsang* at all approaches to accuracy in giving a circuit of 4000 *li* (800 miles) to the kingdom of *Kia-pi-shi*, the localities indicated could scarcely include such an extent of territory.

The Prince of *Kapisa* is described as a patron of Buddhism, and the principal city contained 100 monasteries, with numerous *sthúpas*. The heretics—that is to say, the Hindus—are also numerous; and there are different orders of mendicants—some who go naked, some who smear themselves with ashes, and some who wear chaplets of skulls. Their appellations—*Nirgranthas*, the "Free from bonds," *Pánsupatas* or *Khákis* (perhaps it should be *Paśupatas*), and *Kapíladhárís* are all genuine Sanskrit appellations, and show that these ascetics were all followers of *Siva*. At the time of *Kanishka*, *Kia-ni-se-kia*, who was *raja* of *Kien-tho-lo*, *Gandhára*, *Kapisa* was subject to him. A variety of marvels are narrated by the credulous traveller of the convents and *sthúpas* in the neighbourhood, to which no interest attaches, except that it may be worth while to notice that he speaks of chambers excavated in the mountains, and often quotes his narrations from ancient descriptions of the country.

Six hundred *li* (120 miles) to the east, *Hiouen Thsang* came to the principality of *Lan-po*, the *Lampaka* or *Lampaga* of Sanskrit, the country of the *Lampagæ* of *Ptolemy*, corrupted by the *Mohammadans* into *Laghman*; the distance, however, implies that the traveller must have made a circuitous detour.

The itinerary is here interrupted by a general description of *Tien-chu*, or *India*, which comprises some interesting notices. It will, however, be more conveniently adverted to when we have finished the journey, and are enabled to add such further historical particulars as the travels may offer.

Lan-po is bounded on the north by the snowy mountains, and on the other three sides by the black mountains, the *Siah-koh*. The climate is mild, and, although hoar frost occurs, it never snows, parti-

culars that can scarcely be quite true of Laghman. Rice and sugarcane are cultivated. The country was in a state of anarchy, but was beginning to acknowledge subjection to Ka-pi-sa. The route then proceeds south-east, through a pass in the mountains and across a river, identified by M. de St. Martin with the Kabul river, the Kophes or Kophene of classical writers, the Kubhá of the Vedas, where a remarkable bend of the mountains allows it to pass from the valley of Laghman to the plain of Jelalabad. The first stage is Nakie-lo-ho, the Nangen-har of Baber, or Nagara hárdá of the Hindus; the Nagara also of Ptolemy, which he also calls Dionysopolis. Properly speaking Nagara, according to Hiouen Thsang, is the name of the province, that of the capital being Udyánapura, which M. de St. Martin supposes the Greeks, with their usual national bias, transformed to Dionysopolis, or city of Dionysus or Bacchus. Professor Lassen thinks that there was such a city indicated by the monogram on the coins of Dionysius, one of the Græco-Bactrian kings, subsequent to Apollodotus, and consequently much later than the invasion of Alexander, though not later than Ptolemy. Captain Cunningham (*Journal Asiatic Society, Calcutta*, 17, 482) quotes Abu Rihan for a city named Dinus, halfway between Kabul and Peshawar, which bears the abbreviated name of the city. There are some difficulties in the way of this identification, however, and more positive indications fix it at Begram, or about two miles west of Jelalabad, where, according to Masson, tradition records that there was a city named Adjuna, a possible corruption of Udyana, or Ujana. There is also a village named Nagarak, and the Udyánapura, the city of gardens, has been possibly perpetuated in the neighbourhood under the designations of Bálábágh and Chahárbágh. Again at thirty li south-east from Nakie-ho-lo was a place of great sanctity, named Hi-lo, where were several sthúpas. The tope of Hidda well known to us by Masson's explorations, is no doubt one of the ancient groupés. From Begram, representing Nakie-ho-lo, to Hidda is exactly thirty li, or six miles.

From Nakie-ho-lo Hiouen Thsang proceeds 500 li (100 miles) south-east, to Pu-lu-sha-pu-lo, the Sanskrit Purusha-pura, the modern Peshawar, the capital of Kien-tho-lo, or Gandhára. The distance from Begram, on our maps, is 103 miles, which is a curiously close approximation. Gandhára extended, according to the traveller, to the Indus. Purushapura had been the capital of Kanishka, but the country was now subject to Kapisa. Notwithstanding the number of convents and sthúpas, to which there was great resort, at so short a distance as Hi-lo the people were mostly of the Brahmanical belief, and there were but few who had faith in the true Law, "il y en a peu qui avaient foi

dans la droite loi." There were about a thousand monasteries, but deserted and in ruins, overrun with wild plants, and offering only a melancholy solitude : the greater number of the sthúpas were also in ruins.

From hence the traveller proceeded north-east, about sixty li (twelve miles) to the city of Pu-se-kia-lo-fa-ti, the Hindu Pushkala-vati, the Peukelaotis of Alexander's historians, a city of which no trace remains, but which was possibly situated, in M. de St. Martin's opinion, where a town called in the maps Nicetta, or Nisatha exists, on the north bank of the Kabul river, a little below the confluence of the river Lundi, or of Swát. It has been identified with Hashtnagar, but there is perhaps little or no difference. Hashtnagar is properly the name of the district, that of the eight cities; correctly speaking there is no such town, but, according to Captain Raverty (Transactions Bombay Geographical Society, Vol. X) it is made up of three small adjacent towns, Char, Luddha, and Pranj, close together, and not more than five miles from Nisatha, or fifteen from Peshawar, so that the locality is much the same, and Peukelaotis probably comprised the whole of the vicinity. Extensive ruins are found throughout the neighbourhood. The territory of Gandhára abounding in objects of interest to the Buddhist ascetic, it is not wonderful that Hiouen Thsang spent some time in visiting different places, some of which he names, as Pu-lu-sha, U-tu-kia-han-cha, and Po-lo-tu-lo. The first of these is identifiable with a place called Baroch, the second with Uttakhanda, or the Uay-hind of Albiruni, the Ohind of the maps, a village on the right bank of the Indus, about twelve miles above Attok, one of the most ancient places in the country, according to Major Cunningham. Mr. Court speaks of it as Hund, and observes that the ruins are very remarkable, and mentions inscriptions in characters unknown to the people. Transcripts of two of these were procured by Captain Burnes; they are referred, by J. Prinsep, to the seventh or eighth century, but they are defective and apparently ill copied, so that no satisfactory interpretation can be attempted; but, as the marbles were sent to the Asiatic Society of Calcutta, a further examination might be more successful. It may be admitted, however, that Prinsep's estimate of their date is correct. Po-lo-tu-lo is signalised by Hiouen Thsang as the birth-place of the grammarian Po-ni-ni, or Pánini : the place of his nativity is usually called, by native authorities, Salátura, but one or other of the names may be wrongly read, in the first syllable; the identity of the individual is indisputable, by the especial notice of his grammar and its currency. It is observable, also, that Hiouen Thsang repeats the legend of Pánini's being indebted for assistance to Siva or Maheswara,

whence his first rules, those of the alphabet, are called the *Māheswara Sutrāni*, the Sutras or precepts of Maheswara.

Before crossing the Indus the traveller visits the countries lying more northerly on its western bank, that of U-chang-na, or Udyāna, the garden, the country at present occupied by the Yusef-zis, and watered by the Swat river, the Suastos of Arrian, the Subhavastu of Sanskrit, abbreviated to Suvastu, but literally rendered by the Chinese Su-pa-fa-so-tu. Hiouen Thsang here devoted some time to various peregrinations to monasteries and sthūpas, the site of many miraculous appearances of the Tathāgata himself, according to the pilgrim : whether remains of these monuments still exist has yet to be ascertained, as the habits and temper of the people are little favourable to intimate intercourse. They must have been of a very different race in the seventh century from what they are now, for Hiouen Thsang describes them as gentle and pusillanimous, inclined to cunning and dishonesty, fond of study but not pursuing it with energy : he also states that the population was very numerous, which is not the case at present : the capital city he calls Mong-kie-li, Manglavor, or Mangalapur, a town on the left bank of the Swat, and which the natives affirmed had been for a long time the capital ; the people must have been of Indian origin, if the traveller's statement be credited that their language differed but little from that spoken in India.

The course next followed led the traveller more to the north, along the upper course of the Indus, over difficult mountain passes and across rivers, over which rude suspension bridges were thrown. It is not easy to attempt to trace his route here, not only because the country is yet unvisited by Europeans, but because it is not always clear that Hiouen Thsang himself travelled over the ground. As far as it is safe to come to any conclusion, it appears that he crossed the tracts occupied by the Daradas or Dards to Po-lu-lo, Bolor or Balti ; he then returned southwards to Uta-khanda, and there crossed the Indus to Ta-cha-shi-lo, the Indian Takshasila, the Taxiles of the Greeks.

Notwithstanding the celebrity of the name, the site of Takshasila is matter of dispute. M. de St. Martin, trusting to the mensuration of Alexander's surveyors, in this place preserved by Pliny, places it at Hasan Abdal, or at least at a spot about six or seven miles east or south-east of it, where extensive ruins still exist, and numerous coins have been found. Hiouen Thsang notices several sthūpas or topes in the vicinity of the city, of which more than one is said to have been erected by Wai-yeu, the Chinese translation of Asoka. One of them marked the site where Kunala, or Keo-lang-na, the

son of that prince, unjustly accused by his stepmother, was blinded. The story which Hiouen Tshang relates of the cause of his having his eyes put out, and of the restoration of his sight, is essentially the same as that found in the Life of Buddha, which has been in part translated from the Sanskrit by the late M. Burnouf.

Seven hundred li (140 miles) to the south-east brings the traveller to the capital of the kingdom of Seng-ho-pu-lo, evidently the Sanskrit *Sinhapura*, although no city of that name makes any figure among the principalities noticed in original authorities. The name occurs in the *Dig-vijaya* of Arjuna, in the *Sabhá Parva* of the *Mahábhárat*, as lying near to *Abhisara* and *Uragá*. The first of these is well known as contiguous to Kashmir, and, in fact, a part of it, politically, if not geographically, and we have, therefore, original authority for placing *Sinhapura* high up in the north-west portion of the Punjab. According to Hiouen Tshang it was near the Indus, on the west, and M. St. Martin thinks it probable that traces of *Sinhapura* are to be found in a place called *Sangohi*, in the map given by Captain Cunningham, in his *Ladakh*, about 130 miles from the Indus, and a short distance from the *Jhelum*. Many *sthúpas* are mentioned, the remains of which may perhaps still be recognised. At any rate *Sinhapura* may be placed between the Indus and the *Jhelum*, although *Sangohi* seems to lie rather too much to the south. It is worthy of remark that the country, as well as *Takshila*, was subject to Kashmir; and although there are some chronological difficulties in the way, yet there seems good reason to infer, from the statements of the *Raja Tarangini*, that, at the beginning of the seventh century, Kashmir had established a predominant authority of considerable extent over the adjacent countries.

Some curious particulars are here mentioned of a heretical sect, which have very much the appearance of applying to the Jains. The figure they worship is said to resemble that of Buddha, and their doctrines are asserted to be borrowed from the Buddhist scriptures. Their religious teachers are divided, also, into two parties, one going naked, the other wearing white vestments, in whom, therefore, we have the *Digambaras* and *Swetámbaras* of the Jains.

From *Sinhapura* Hiouen Tshang returned to *Takshila*, and then spent some time in visiting the neighbouring countries to the north and east. One of these, *U-la-shi*, is the *Urasa* of the *Raja Tarangini*, and may be the *Uraga* of the *Mahábhárat*; the bearing given by the traveller always to the south-east seems at variance with its position in any part of the Punjab, and we should rather look for it more to the north or in the district of *Gilgit*, especially as still in the direction south-east, about 1000 li, or 200 miles across mountains, he comes

to *Kia-shi-mi-lo*, which is undoubtedly Kashmir. Hioen Thsang remained here two years. Besides the description of the country, sufficiently correct, Hioen Thsang repeats the local legend of the valley having been a lake, only he ascribes its desiccation to an Arhat of marvellous sanctity. He also speaks of the capital as the new city, and notices the existence of the old in a position the correctness of which Captain Cunningham confirms, finding the remains at *Pandranthan*, or *Purana-sthana*, the old place, a mile and a half south of the *Takht-i-Suliman*, which is in Srinagar. The new city, as mentioned in the *Raja Tarangini*, was built by *Pravarasena*, whom I have placed conjecturally towards the end of the fifth century, Professor Lassen about the middle of the third century. According to our authority, *Asoka* reigned in Kashmir, 100 years after the *Nirvána* of *Sákya*, and *Kanishka* four centuries after the same event. For two centuries the country was governed by a king of the *Kilito* (*Kiriya*) race, who abolished the religion of Buddha, but it was restored by the *Raja* of the Himalaya, a *Tushkara*, or Turk, who defeated and put to death the *Kilito* Prince. The latter race, however, recovered the supremacy, and, at the time of Hioen Thsang's travels, he observes that the king has no great faith in Buddhism, and is only interested in the heretics and the temples of the gods.

From Kashmir the route first bends north-west, on which, at 145 li (29 miles) from the capital, it crosses a large river, the *Vitastha* or *Jhelum*; it then turns south-west to *Pu-an-nu-tso*, the modern *Punch* or *Punach*, and thence to *Ho-lo-she-pu-lo*, *Rajapura*, *Rajawar*, or *Rajore*. The distances specified are somewhat in excess, but that may be in part accounted for by the greater length of the route over a mountainous than along a level country. According to Major Cunningham, the actual distance in miles in such countries is about a third more than that measured on the map.

There is some indistinctness and confusion in the account of the next movement. In the biography it is said the traveller came, after two days, to *Chen-ta-lo-po-kia*, the *Chandrabhága*, or *Chinab*, and thence to the town of *She-ye-pu-lo*, or *Jaypur*, and on the next day he arrived at *She-kie-lo*, the Sanskrit *Sákala*, the *Sangala* of Arrian, situated between the *Irávati* or *Ravi* and the *Beyah* or *Vipásá*, the *Pi-po-she* of the Chinese. The distances specified are, however, wholly incompatible with the actual distances, and there are obvious errors in this respect. To the kingdom and its capital the name of *Chekia* is given, and the boundaries of the whole are said to be the *Beyah* to the east, and the *Indus* on the west, so that it would include *Multan*. *Sákala* was the ancient capital; it was mostly in ruins, but

the foundations of the walls were still to be seen, and a small town had grown up in the centre. The actual capital appears to be that of the king Chekia, and, according to tradition, the old name of the Sikh capital was Chek before the tank was dug, which gives it the appellation of Amrit-sar.

The next stage in the Si-yu-ki is the country called Chinapati, about 100 miles east from the frontiers of Chekia. The biographical memoir interposes a city named Na-lo-seng-ho, Narasinha; its position is not identified. The distance and direction render it possible that Chinapati is to be found in some one of the nearest hill-states, as that of Katoch, or its capital Kangra, according to the conjectures of Captain Cunningham (J.A.S.B., vol. xvii, part 2, page 23.), who states that an inscription found there calls the kingdom Gachché Raj, in which he thinks he can trace the name Gachu, known in Mongol literature as that of a country in which Jalandhara was comprehended.

About 150 li south-east of this is the kingdom of She-lan-to-lo, in which we have no difficulty to recognise Jalandhara; the bearing, however, should be south-west not south-east, if the point of departure be rightly indicated. Thence to the north-east we come to the kingdoms of Ku-lu-tu, Lo-ho-lo, San-po-ho,—names that may be readily recognised in the hill-districts of Kulu, Lahaul, and Chamba. The first is named by Varāhamihira as Kulata. San-po-ho is also called, it is said, Mo-lo-so or Mo-lo-po, in which M. de St. Martin recognizes the Malavas of the Punjab mentioned in the Mahābhārata, by Pānini, and in the Allahabad inscription. He considers them also the same people as the Malli of the western portion of the Punjab or Multan, mentioned by Alexander's historians. But this seems to be without sufficient foundation, and the positions are too far apart to be identical.

Turning hence to the south, Hionen Tshang crosses a large river and enters the principality of She-tu-tu-lo, in which we have clearly the name of the river the Satudru or Satudra,—the Sutlej. The distances and bearings, however, are not capable of precise adjustment with those of the maps; and the route followed by the traveller indicates a direction more to the west than would have been looked for, by which he avoids Thaneswar and ancient Delhi, and comes, at a distance of 800 li (160 miles) to Po-li-ye-to-lo, the Chinese representative of Pāriyātra,—a place of which we have no other notice. M. de St. Martin would identify it with the Byrat of the maps, a town in the principality of Jaypur, about 100 miles west of Mathura—a possible relic of the ancient Sanskrit name of this part of India or Virāta, which figures in the Mahābhārata. The distance corresponds

well enough, as from Po-li-ye-to-lo, Hiouen Thsang comes, at a distance of 500 li (100 miles) east to Mo-thu-lo or Mathurá. The principality contains about twenty convents and a number of sthúpas, seven of which enshrine the remains of as many of the most celebrated disciples of Sákya, or Sáríputra, Mudgalaputra, Púrna Maitráyaniputra, Upali, Ananta, Ráhula, and Manjusrí. These were the objects of an annual pilgrimage.

The route of Hiouen Thsang then again assumes a northern direction, and in various respects of detail is more than usually difficult to follow. From Mathura he goes to Sa-ta-ni-shi-fa-lo, Sthaneswara, or Thánéswara, 500 li north-east, when it should be at least double that distance, and is rather to the north-west than north-east. It is somewhat singular, too, that he takes no notice of ancient Dehli on his way ; it must have been in existence, and his passing it by in silence can only be accounted for by supposing, either that there is a hiatus in his journal, or that there was nothing in the city of Buddhist interest ; yet this were scarcely possible, as the Lát was there, and the edicts of Piyadasi ; or it might have been that the ruling authorities were actively hostile towards Buddhism, for the Rajas of Delhi were at this date Rajputs, and the Rajputs of Central India at least seem to have always been supporters of Brahmanism. That by Sthánéswara we are to understand Thanesar, or Kurukshetra, there is not only the evidence of the name and bearing, but Hiouen Thsang describes it as the scene of a fierce battle between two kings disputing the supreme authority, which had taken place in very remote ages, as was evident from the size of the human bones which were found in the soil, alluding obviously, though in a most meagre manner, to the war of the Mahábhárata.

The movements of Hiouen Thsang are here again erratic, but it is to be recollected that we are not to look upon his journey as one and continuous ; it is a series of excursions in various directions, interrupted by temporary halts of shorter or longer duration, from whence he starts upon a different and occasionally reversed route ; thus he now proceeds north-east about eighty miles to the principality of Sa-lo-kin-na, bounded by the Ganges on the east, the mountains on the north, the Yamuna flowed through the centre ; the capital is said to be mostly in ruins, but the remains are substantial ; the name represents Srngghna or Sughna, which is enumerated in original Sanskrit lists amongst the countries of the north ; the locality is not improbably that of Saharanpur. East of the Yamuna 800 li (160 miles) Hiouen Thsang comes to the banks of the Ganges, the biography says to the sources, which is not very likely. The circumstances he relates of

the sanctity of the river are quite in harmony with native superstitions—bathing in the river effaces all sin; drowning in it secures heaven; and the defunct whose bones are cast into it, revive to worldly enjoyment. After crossing the river, the traveller comes to Mo-ti-pu-lo, Matipura, the situation of which is questionable. M. de St. Martin endeavours to determine it by reckoning backwards from the places to which Hiouen Thsang subsequently proceeds, until he reaches a definite point. Thus, from Mo-ti-pu-lo to Kia-pi-shoang-na, 400 li south-east; O-hi-chi-to-lo, 41 li south-east; Pi-lo-shan-na, 265 li south-west; Kie-pi-tha, or Seng-kia-she, 200 li south-east; and Kie-jo-kio-she, 200 li also to the south-east, or altogether 1100 li (220 miles) in a generally south-east bearing, the last name readily resolving itself into Kanyakubja, or Kanoj, which gives the point desired. Seng-kia-she is also obviously Sankásya, a city named in the Rámáyana, the existence of the ruins of which to the present day we learn from Major Cunningham, who has described it in the Society's Journal; it is 54 leagues north-west of Kanoj on the left bank of the Kalinadi, which agrees well enough with the distance of the Chinese traveller. It is mentioned also by the elder traveller, Fa Hian, as noticed in my summary of his travels (J.R.A.S., vol. v. p. 121). Pi-lo-shan-na, M. de St. Martin thinks, may be the Karsana of the maps, judging from distance and direction; and O-hi-chi-to-lo, no doubt, represents Abichhatra; and north-west from this is Matipura. M. de St. Martin thinks it possible that some indication of it may be afforded by the ruins of a place called by Tieffenthaler Madáwar, three leagues from Sahanpur, and an hour's journey from the east bank of the Ganges; the whole distance, 1100 li, or 220 miles, would bring us to the northern portion of Rohikhand. Again, from Matipur, the traveller goes 300 li, sixty miles north, to Po-lo-hi-mo-pu-lo, or Brahmapur, which has been conjectured, by Major Cunningham, to apply Srinagar, a conjecture in which M. de St. Martin concurs. He would also identify the word Mati with Madhu, or Mathu, and the people called Madhavas, or Mathavas, who founded Mathura, and whose possessions extended east of the Gandaki, into Videha, termed after them Mithila. This locality, however, is very different from that of Srinagar, even if the reading of Mathava for Madhava be correct, which is questionable, depending upon a passage cited by Weber from the Yajush, which says, "the Sadanira is the boundary of Kosala and Videha, occupied by the descendants of Máthava." Megasthenes mentions a people called Mathæ, whose country is watered by the Erineses, which M. de St. Martin thinks may be the river of Benares, Varánasí. We can scarcely, however, elevate the conjoined rivulets,

the Barṇa and Asi, to the dignity of a feeder of the Ganges. A list of Buddhist patriarchs, published by M. Remusat, mentions, also, that one of them, on his decease, named, as his successor, Gayasata, in the country of Matī, he himself dying at Srāvastī. This does not help us much to the position of Matipur, although it is considered as confirming, with the other circumstances, its identity with a part, at least, of the ancient principality of Kosala, or Oude. That it lay more to the north is, however, further proved by Hiouen Thsang's mention of the city Mo-yen-lo, on the north-west of Mo-ti-pu-lo, near the east bank of the Ganges, not far from which is a temple of the gods, which is called the Gate of the Ganges, the Gangadwara, or, subsequently, Haridwāru, the Haridwār of the Hindus, to which they repair by hundreds and thousands to bathe. The city of Matipur has not left any traces. North of Brahmapur, amongst the mountains, was a principality named Su-fo-la-na-kiu-to-lo, Suvarṇagotra, from its yielding gold, *suvarṇa*. It is also called the female kingdom, being ruled over by a woman. Hiouen Thsang does not visit it, and we have only the popular notion of a Strī-rājya in the mountains, spoken of in the Puranas, and originating, perhaps, in the Polyandrisms of the Bhotiyas. It is bordered on the east by Tu-fan, Tibet; north by Yu-tien, Khoten, and west by Chamba. The first and last are not far from the truth. Khoten is inaccurately placed.

Of the places passed on his way, from Matipura to Kanoj, the only one of note is Sankāsya, where are some remarkable and extensive Buddhist convents, although there are also a number of temples of Siva. One object worthy of notice was a pillar, seventy feet high, erected by Asoka: perhaps a search among the ruins of Sankāsya might discover some vestiges of this column. The next stage, Kie-jo-kio-she is not only identified with Kanyakubja, by similarity of name, but Hiouen Thsang repeats, with very slight modification, the legendary origin of the appellation, as related in the Rāmāyana, the crookedness (kubja) of the princesses (kanyā), in consequence of the imprecation of a Rishi, whom they had refused to marry. Hence the city was called Kṣiu-na-cheris, *c'est à dire la ville des filles bossues*. Some interesting circumstances, of a political character, are related of this city, in which Buddhism was flourishing, but we may reserve these for an examination of the historical portion of the Si-yu-ki.

Resuming his journey from Kanoj, Hiouen Thsang comes, at a distance of about 100 li (20 miles) south-west, to the town of Na-po-ti-po-ku-lo, which represents in Sanskrit Navadvakula, on the east bank of the Ganges. There is a town in such a position, but it now

bears the Mohammadan name of Nobut-ganj. Whether traces of any of the monasteries or topes, noticed by the traveller, are still to be found there remains to be determined. One of the sthúpas was said to enshrine the hair and nails of Buddha. Six hundred li (120 miles) from hence to the south, Hiouen Thsang enters the kingdom of Ayuto, Ayodhya, or Oudh; the actual distance is about 150 miles, which is a sufficiently close approximation. Thence he proceeds to O-ya-mukhie, a country on the north bank of the river, which he terms by the generic name King-kia, or Ganga, but which must here mean the Saryu. The name represents Haya-mukha, horse-faced, but there is no place so denominated in any Sanskrit list. The place he next comes to is of more ready identification: Po-lo-ke-ya, or Prayága, situated, as he accurately states, at the confluence of two rivers.

From hence he passes through an extensive forest, 100 miles south-west, when he comes to Kiau-shang-mi, in which we at once recognise Kausámbi, a well-known name in Hindu tradition and fable, but of which the exact site has not been determined. Lassen, following Cunningham, is disposed to place it at Kusia, near Kara, on the south bank of the Ganges. M. de St. Martin thinks that the bearing of the journal is wrong, and that it should be north-west, not south-west, but objects to the distance, as Kara is not above thirty miles from Allahabad. I long ago suggested the same locality, in the *Oriental Quarterly* for March 1824, in a note on Kausámbi, which is repeatedly mentioned in the Brihat Kathá, some of the early chapters of which I there translated. After a short time I had another occasion to consider its position, and then located it in the neighbourhood of Chunar, which would harmonise with the direction given it by Hiouen Thsang, and would not be very far out as to distance, Chunar being about eighty miles west by south from Allahabad. Whether any vestiges of Kausámbi are to be found in that neighbourhood is a subject for investigation: that the Kausámbi of the Chinese traveller and of the Brihat Kathá are the same is proved, by the former mentioning its prince, U-to-yen-na, the Sanskrit Udayana, whose adventures with the princess of Ujayin form a prominent part in the Brihat Kathá, and who was an ancient hero of fable, so as to be alluded to by Kálidása, in the *Cloud Messenger*:

“Prápyávantim, Udayánakathá kovida grāma vriddhám.”

Hiouen Thsang, of course, makes him one of the faithful, and says that he set up a statue of Buddha, still to be seen, although the monasteries were in ruins and almost deserted.

From Kausámbi, Hiouen Thsang seems to have taken a somewhat

unintelligibly circuitous route : he returns to the north, passes 700 li (140) miles through a forest, crosses the Ganges, and comes to Kiashe-pu-lo, and thence, 180 li, to Pi-so-kia. The first, representing the name Káshapura, is not identifiable. M. de St. Martin thinks the second, expressing the Sanskrit Vaisákha, may be the Pali Bhesakala mentioned in the Mahavanso ; but this is very doubtful.

From hence, at 500 li to the north, Hiouen Thsang comes to Shilo-fa-si-ti, the Sanskrit Srávasti. Fa Hian makes it about 300 li *south* of Káshapura. There is evidently something wrong in the itinerary, not so much of distances as of bearings, which is not very wonderful, especially as it is not the traveller himself who specifies them. Both travellers agree in placing Srávasti north-west of Kapila-vastu 500 li, which would bring it to the upper course of the Rapti close to the mountains. The late Sir H. Elliot found a village about eight miles west of Faizabad bearing almost the same name, but the position is scarcely reconcilable with either itinerary. The capital of Srávasti was in ruins even at this early date, and the neighbourhood abounded with sthúpas and monasteries now deserted.

From Srávastí the route proceeds to Kie-pi-lo-fa-su-tu, or Kapilavastu, the birth-place of Sákya-sinha, and which the best authorities are agreed to place north of Gorakhpur, near the foot of the mountains on the Rohiní river, which joins the Rapti river from Nepal. The objection that has been taken to this site is, that Dr. Buchanan, exploring the valley of the Rohini above Gorakhpur, came upon no traces of any ancient city. This objection is of no great weight, for the country was possibly not very carefully examined ; and if it had been, as Kapilavastu was abandoned and in ruins even at the time of Fa-Hian's travels, or in the fourth century, climate, time, and the wilderness operating uncontrolled for perhaps 2,000 years, are not likely to have left any distinguishable remains. From the forest occupying the site of Kapilavastu, Hiouen Thsang followed the same route to Kusinagara, Kieu-shi-na-kie-lo, by way of Lan-mo or Rama Grama, which is said to have been the scene of Sákya's changing his garments after leaving his palace, and which must have been close to Kapilavastu. The site of Kusinagara I showed, in my memoir of Fa-Hian's journey, to be, in all probability, Kusia, in the eastern division of Gorakhpur, where indications of an extensive Buddhist city had been discovered. They were described by Mr. Liston in the Bengal Journal, which agrees, according to M. de St. Martin, with the bearings and distances of Hiouen Thsang's route. It was near Kusinagara that the Tathágata entered into Nirván in the eightieth year of his age.

From Kusinagara Hiouen Thsang turned back, and, at the distance of 200 li, came to a large town, of which he does not give the name; and from thence, after passing through a thick forest for 500 li, or 100 miles, he came to Po-lo-ni-se or Benares, which is actually about 150 miles from the situation assigned to Kusinagara. The capital or the city of Benares, is rightly described as extending along the Ganges for about nineteen li or nearly four miles—about the actual extent at the present day. It is five or six li in breadth, which again is about its actual average. The population of the city and suburbs was numerous, amongst whom few followed the law of Buddha. There were, however, some thirty monasteries with above 3,000 ascetics. The predominant worship was that of Siva or Maheswara, who has always been the especial divinity of Benares. A great number of monuments, vihāras, and sthūpas were visited in the neighbourhood of Benares by Hionen Thsang, one of which is supposed to be identifiable with Sárnātha—rendered, by M. Julien, *Mriga-dava, le bois des cerfs*, or, more agreeably to the Chinese, *Lu-ye, le parc des cerfs*.

The next city is 300 li on the east of Benares, also on the Ganges. There is no attempt at representing phonetically its Sanskrit name. The Chinese, Chan-cheo-kue expresses "town of the lord of war," Yuddhapati pura, perhaps for Kártikeya-pur, although we have no such place in any ancient list or modern map: the distance, sixty miles, would bring us to Ghazi-pur; and it is curious, although it may be accidental, that this Mohammadan name, the city of the Ghāzi, warrior against infidels, bears some affinity to the Yuddhapati of the Hindus.

Crossing the Ganges, Hiouen Thsang arrived at a town called Mo-ho-so-lo, Mahasāra, inhabited entirely by Brahmans, a place that may be identified with a village near Arrah named Masār, not only by its position and bearing, but by the extensive remains in its vicinity found there by Dr. Buchanan. From hence, again crossing the Ganges to the north-east, the traveller came to the city celebrated in both Brahmanical and Buddhist legend, Fei-she-li or Vaisāli. Hiouen Thsang makes it 180 li or about 26 miles from the Ganges, on the banks of the Gandak; and this brings us to a spot where extensive ruins attest the former existence of an ancient city, and where one of the Priyadarsi columns, with an inscription, was discovered, or Bakhra, near which a village still called Basar, may suggest some resemblance to the ancient appellation. Although there were numerous relics of Buddhism in the adjacent country, there were not above three or four monasteries in the capital, and those thinly occupied; the rest were all in ruins, whilst there were some dozens of Hindu

temples. Fa-Hian speaks of Vaisáli as being in a ruinous condition—*la capitale n'offre partout que des ruines.*

Before crossing the Ganges, Hiouen Thsang makes a diversion to the north, and visits the countries of the Fo-li-shi and of Ni-po-lo. The former represents the Sanskrit Vriji, a name, however, unknown to Brahmanical literature, although it occurs as Vaddhis in that of the Buddhists, as is mentioned both by Turnour and Burnouf, a powerful tribe, situated between the Ganges and the mountains, on the east of the Gandak river. At this time they must have been compelled to fall back from the Ganges, and the bearing and distance would place them about Janakapur, in Chinese Che-shu-na-pu-lo, the ancient capital of Mithilá, under Janaka, the father of Sita. In Ni-po-lo we have obviously Nepal, and the identity is confirmed by the traveller's description of it, as situated among the snowy mountains.

Returning to Vaisáli, Hiouen Thsang there crossed the Ganges and proceeded to the kingdom of Mo-kie-to, Magadhá, or South Bahar, the scene of Buddha's first teaching. On the south bank of the river was an ancient city, which we are rather surprised to learn had long been deserted. This, it is said, was called, in very remote times, Keu-su-mo-pu-lo, the Kusuma-pura of Sanskrit traditional history, and afterwards Po-to-li-tseu-ching, or Pátaliputra-pura. The story he tells, to account for the meaning of the name, the city of the son of the Pátali flower, bears some affinity to the legend narrated in the Brihat Kathá; and he also mentions that it was the capital of Asoka, who transferred to it his royal residence from Rajagriha. It is difficult to understand how Pataliputra should have fallen so soon into such decay as Hiouen Thsang ascribes to it, so shortly after Fa Hian's visit, or only 231 years before, as he describes it as flourishing, *en pleine prospérité*. At present, he says (the later pilgrim) there remain only the old foundations; the monasteries, temples of the gods, and sthúpas of which the ruins are visible may be counted by hundreds: there are not above two or three still standing, only on the north of the ancient palace and close to the Ganges, there is a small town, which contains about 1000 houses.

After visiting the remains of a number of Buddhist monuments in this part of the country Hiouen Thsang proceeded to Kia-ye, or Gaya, at a distance of 485 li, or 97 miles from the Ganges, the actual distance being between sixty and seventy, but Hiouen Thsang's route involves, apparently, sundry deviations from the direct road, which may account for the difference. The description given by both the Chinese pilgrims of the objects in the vicinity of the place, as well as

the name, leave no doubt of the identity of their Kia-ye with the Buddha Gaya of the present day, although, at the time of Hiouen Thsang's visit, it was chiefly occupied by Brahman families, who were treated with great veneration by both prince and people.

During his stay at Gaya, Hiouen Thsang visited an infinite number of viháras and sthúpas, statues of Buddha, and the Bodhi-druma, the tree of intelligence, in an enclosure of four walls. After satisfying his devotions and relating a number of marvels he resumed his travels, passing through a forest, east of the Mo-ho or Mahi river, 100 li to the mountain Kiu-kiu-to-po-tho-shan, Kukkuta-páda, also called Ken-lau-po-to-shan, or Gurupáda. This is rather a mountain range, with lofty summits, and numerous valleys and grottoes. Another 100 li bring him to the mountain Fo-to-va-na, or Buddhavana, where were extensive excavations. Other mountains and caves are passed, until he arrives at the town Kuságára-pura, or Ku-she-ki-lo-pu-lo, or the city of the sacred grass, the Kusa, in the centre of the kingdom of Magadhá and the ancient capital, enclosed on the four cardinal points by lofty mountains. There is at present no indication of such a name as Kuságara, but it seems to have been the same as Rajagriha, the residence of the kings of Magadhá, at the time of Buddha's appearance ; known in Sanskrit literature as Girivraja, meaning the assemblage of mountains, indicating the site of the city in the midst of mountains, five, according to the Mahábhárata, and to a more modern description, that of Père Tieffenthater, in 1765. A Jain in the service of Colonel Mackenzie, who travelled through Behar, and whose journey I translated, and published in the Calcutta Annual Register of 1821, found the remains of Rájagriha spread over a space of four miles by two, having four hills at the cardinal points. Major Kittoe visited it still later, and published a plan of the topography in the 16th vol. of the Transactions of the Asiatic Society of Bengal, Part 2, p. 954. At about six or seven miles north of Rajagriha Hiouen Thsang came to the monastery of Nalanda, the Nalo of Fa-Hian, one of the most considerable in India, and resided there five years. Very extensive remains have been found in this situation, described by Dr. Buchanan and Major Kittoe, which are probably those of the monastery in question : they are situated in the neighbourhood of a village named Baragaon, the large village, possibly a corruption of Viháragráma, the village of the monastery.

Setting out again on his travels Hiouen Thsang comes, at about two miles, to a town called Kiu-li-kia, and thence, at four miles distance, west, to Kia-lo-pi-na-kia, severally, in Sanskrit, Kulika and Kalapinaka. He then retraces his steps towards the Ganges, generally

in a north-east direction, till he comes to a village called I-o-in-ni-lo, Rohinila, a place which may be identified with the Royanala of Rennell, at the eastern extremity of Bahar.

Following the course of the river to the east Hiouen Thsang comes to the capital of I-lau-na-shan, at a distance of forty miles on the Ganges. The Chinese appellation is equivalent in meaning to Hira-nya-parvata, or the golden mountain, as in the neighbourhood of the city was a mountain emitting smoke; and although this is no longer the case, yet the presence of thermal springs, as at the Sita-kund, together with the agreement of bearing and distance, identify Hiranya-parvata with Monghir. From thence, following the southern bank of the Ganges, the route comes to Chen-po, the Sanskrit Champa, the ancient name of the capital of Anga, in the vicinity of the modern Bhagalpur. At 150 li from Champa was an insular rock, which is exaggerated into a mountain, but Hiouen Thsang derives his account from information, not having visited the spot, which is no doubt the rock of Kolgong.

The journey of Hiouen Thsang steadily pursues a southern direction; at 80 miles he comes to a kingdom written Kie-chu-u-ki-lo, or Kie-ching-kie-lo, equivalent to Kajingara, conjectured by M. de St. Martin to be identical with a place on the south bank of the Ganges called in Rennell's map Kajeri, about 85 or 90 miles from Champa. The next country he comes to is called Pun-na-fa-ta-ná, Pundravardhana. Pundra is the Sanskrit name of western Bengal, and in the latter member of the compound we may have Vardhamána, the classical designation of Burdwan. His next journeys are not easy to follow, and can only be understood by supposing that they are discursive, not continuous, carrying him to Kia-mo-leu-po, or Kamarúpa, which is well known as Western Asam. Hence he returns south 1300 li (260 miles) to San-mo-ta-cha, near the sea, and which must have been therefore near the delta of the Brahmaputra. Samata, or Samátata, is named in the Allahabad pillar, and in a list of countries in the Varáha Sanhitá; but nothing further is known of it, and it may or may not be identical with the Chinese name. Hence he goes to Ta-mo-li-ti, the Sanskrit Támralipta, well known both to Brahmanical and Buddhist geography, a seaport and commercial emporium as late as the thirteenth century, and still a station of some importance as Tamlúk.

Here again we have an interruption in the direct route, and Hiouen Thsang visits a country 700 li (140 miles) north-west from Támralipti, called Kie-lo-na-su-fa-la-nu, equivalent to Karna-suvarna; the bearing and distance would bring us to the Suvarna-rekhá, the

Subanrika river of the maps, watering the country of Sinh-bhúm ; he then comes back a little distance to the south-east, and is now in the kingdom of U-cha, Udra, Odra, or Orissa ; he does not name the capital, but we know from Stirling's History of Orissa, that princes of the Kesari dynasty were ruling in the seventh century at Jajpur, which still exists.

Travelling 1200 li (240 miles) through thick forests, Hiouen Thsang arrives at a kingdom called Kong-yu-tho, the identification of which is not very obvious ; 1400 or 1500 li (300 miles) further south we more readily recognise in Ki-ling-kia, Kalinga, the name given by Sanskrit and classical writers, and by the people of the Eastern Archipelago, to the upper part of the Coromandel coast, usually including Orissa ; the whole distance would bring us near to the mouths of the Godavery.

Going now north-west 1900 li (nearly 400 miles), Hiouen Thsang comes to the kingdom of Kiao-sa-lo, Kosala, surrounded by mountains and forests. Kosala must here be applied to a part of Berar, and is known in Hindu geography as Dakshina-Kosala, South Kosala, the northern being the same as Oudh. Travelling south about 900 li (nearly 200 miles), Hiouen Thsang comes to Ping-ki-lo, or Warangal, the capital of An-ta-lo, or Andhra, the ancient, and indeed the actual name of the kingdom of Telingana. The people, he says, are fierce and barbarous ; their language is different from that of Central India, but the form of the letters is much the same. There are about twenty monasteries and thirty temples.

A thousand li south travelling through forests, which, it may be noticed, are everywhere abundant in this part of the Dakhin, the traveller comes to To-na-kie-tse-kia, equivalent to Dhanaka-cheka, a name which is not now recognisable ; but Hiouen Thsang says the country is also called Great Andhra, which would be in Sanskrit Mahāndhra, and which M. de St. Martin would identify therefore with Rajamahendri : he is obliged however, to admit that this is south-east, not south of Warangal, and we have already brought the traveller to this position on his way from Orissa. There is also a description of excavations, to which nothing in the neighbourhood of Rajamahendri corresponds. West of the city, says Hiouen Thsang, is a monastery called O-fa-lo-shi-lo Senghialan (or the convent of Avanasila) : the first king of this country constructed it, it is said, in honour of Buddha. He hollowed out the valley, made a road through it, opened the sides of the mountains, and erected pavilions : long galleries and great lateral chambers rested on the grottoes, and communicated with the excavations : for a thousand years after Buddha's Nirvána, these caves were frequented by sages and saints ; after that time the

inhabitants were mixed up with low people, and the monastery had been abandoned for a century. This account would rather relate to some of the earliest Buddhist excavations, such as those of Ellora, and the bearing and distance would not be very different from those specified.

At a distance of 1000 li (200 miles) lay the kingdom of Chau-li-ye, the Chaula of the Bhāgavat, Chola of Menu; it appears higher up in the Dakhin than it should be placed according to local tradition, but the term was used with some latitude, as I have had former occasion to observe. Buddhism was here nearly extinct, and the naked followers of Siva were in great numbers.

The next kingdom is that of Ta-lo-pi-cha, or Drāvira, at a distance of 1500 or 1600 li (320 miles). Properly speaking, we should have come to Drāvira before or on the north of Chola, but the two are to a certain degree the same, and the former is apparently more inland, whilst Chola is the coast; for the capital of Drāvira is called Kien-chi-pu-lo—almost a literal transcript of the ancient Sanskrit name Kanchipura, modernised as Conjeveram. Although Brahmanism boasted of eighty temples and numerous naked mendicants, Buddhism was more flourishing here than in most cities, as Hiouen Thsang says the city contains 100 monasteries and 10,000 ascetics.

M. de St. Martin limits Hiouen Thsang's southern travels to Kānchi, and conceives the next country he notices, Mo-lo-kiu-cha, Malakūta, to have been known to him only by report. The text, however, says,—"En partant de ce pays il fit environ trois mille li au sud, et arriva au royaume de Mo-lo-kiu-cha." At the same time further on it is said that on leaving the kingdom of Drāvira, he travelled north, and passing through forests and unoccupied plains as well as several small towns, he came to the Konkan. At any rate the distance of the route Mo-la-kiu-cha is much exaggerated; for, instead of 600 miles, half that quantity from Kānchi reaches the extreme point of the peninsula. There is also some confusion as to the characteristics of the locality, or it comprises a wider extent than the identity of the name with Ma-la-ya would usually denote. It is bounded on the south by the sea. This applies to the whole extremity of the peninsula. Thence rise the mountains on which grows the sandal-tree Chen-ta-ni-po, Chandana, which carries us over the Western Ghats into Travancore. According to Hiouen Thsang, the camphor-tree also grows in these mountains,—Kie-pu-lo, Karpura. Leaving Malakuta in the direction of the north-east a town on the sea-coast is reached named Che-li-to, Charitrapura "a town of departure," as from hence vessels sail to Seng-kia-lo, Sinbala or Ceylon.

Hiouen Thsang did not visit Ceylon, and the particulars he relates of it are merely legendary. He mentions, however, in accordance with tradition, the introduction of Buddhism by Mo-hi-in-to-lo, Mahendra, the younger brother of Asoka, and he speaks of the vihâra of the tooth of Buddha, adjoining to the palace of the king.

After this it is said that Hiouen Thsang proceeds from Drâvîra to Kong-kien-na-pu-lo, Konkanapura, or the Concan. His account of the kingdom is brief; the only notice of interest is, that the people throughout India use the leaf of the palm for writing upon. The distance is 2000 li (400 miles), which will bring us into the Bijapur district. M. de St. Martin thinks it possible that the capital, which is not separately named, may have been the ancient city Bânâvasî, on the Tungabhadra. From hence Hiouen Thsang proceeds 2500 li (500 miles) to the country and city of Mo-ho-la-cha, in which name we have no doubt Mahârâshtra. This distance would bring him into Kandesh, which would not be inconsistent with his next journey westward 1000 li, or 200 miles, following the course of the Nai-mo-tho or Narmada river to Pa-lo-kie-che-po, Varikachapura,—the Barygasa of Ptolemy, or Baroch. We have no other clue to the site of the capital of Maharashtra than the description of an extensive and elaborately excavated vihâra on the eastern frontier, where all around upon the rock are sculptured various events in the life of Buddha in the most exact detail, and where a stone elephant stands at each of the gates of the Vihar, facing the cardinal points of the horizon. We have no knowledge of any excavations in this direction. The sculptures of events in Buddha's life would apply very well to those of Amravati, which could not be very much out of the way, but we have no mountain nor caves.

In this part of Hiouen Thsang's travels, as observed by M. de St. Martin, there is much less precision both as to bearings and distances than has so far prevailed, and the probability of identification is proportionally diminished. The accounts are shorter and more meagre, and there are various irreconcilable differences between the account in the life and in the narrative of the Si-yu-ki.

The first kingdom to which Hiouen Thsang travels from Baroch is Mo-la-po or Mâlava. He makes the distance 2,000 li, which is at least twice too much, and places it on the south-east of the Mo-ho (Mahi) river, which would take us to Dhâr—the capital of Mâlava, as we know at a not much later period. It is one of the two places where the study of Buddhist books is most assiduously pursued, the other being Magadha; and Dhar had, at a somewhat later date under Bhoja, a high literary reputation. Buddhism had several hundred

monasteries here, but the heretics had an equal number of temples, and were very numerous.

Two thousand four or five hundred li (500 miles) south-west we come to the kingdom of O-cha-li, at the confluence of two seas : the bearing would bring us to the extremity of the peninsula of Kattiwar, and the distance from Ujayin or Dhar would not be much in excess. By the confluence of the two seas we may also understand the mouth of the Gulf of Cutch. We have no help, however, in the name; but the next move, 300 li (60 miles) to the north-west, brings us to the province of Kie-cha; and here, name, bearing, and distance place us confidently in Cutch, the Sanskrit Kachcha, or maritime region.

Hiouen Thsang now proceeded, it is said, 1000 li (200 miles) north, to Fa-la-pi, in which we recognise Vallabhi. The distance is not far out, but the bearing is most indubitably altogether wrong : from no part of Cutch could the city of Vallabhi lie north, being in the Gujerat peninsula, while, if the kingdom said to be 6000 li, or 1200 miles in circuit be carried into Rajputana and Malwa, we have more of an easterly than westerly direction. The bearing of the capital, however, was south-east. M. de St. Martin says that the kingdom of Vallabhi was also called Pe-lo-lo, or Lolo of the north, and Lo-lo he identifies with the Sanskrit Lāta, applied to this part of India, the Lār of the Hindus and Larike of the Greeks. The application of the term is correct, in part, but neither in the Si-yu-ki nor in the memoir do I find any such name as Lo-lo given by Hiouen Thsang. It appears to be derived from some other version of his travels, cited by M. Jacquet (*Jour. Asiatic Society of Bengal*, v. 685).

From Vallabhi an excursion apparently takes place to a state dependent on Malwa, called O-non-to-pu-lo, Anandapura, 700 li north-west; but he again sets out from Vallabhi, and, proceeding 500 li west, comes to the kingdom of Su-la-cha, or Surāshtra. The distance is sufficiently exact, but the bearing again is entirely wrong, and it should be east, not west. The country is dependent on Vallabhi; it contains 50 monasteries and 100 temples. The city is a great emporium of trade. Near the capital is the mountain called Yeou-chen-ta Ujayanta, in which there are excavations. Although the name is identifiable there is considerable perplexity as to the position. It is not, according to M. de St. Martin, either the Surastrene of the Greeks nor the Surath of modern times, but part of Gujerat or Kattiwar, the capital being Junagarh, in the vicinity of the mountain Ujayanta. It is difficult to reconcile this with the relative position of Vallabhi and

with the statement of Hiouen Tshang, that the capital touches the Mahi river on the west, which places it on the east of the Gulf of Cambay or the Mahi-kanta, a position quite incompatible with that of Junagarh.

From Su-la-cha it would seem that Hiouen Tshang returned to Vallabhi, for he again starts from that city and travels about 1800 li (260 miles) north, to the kingdom of Kiu-che-lo, Gurjara, the capital of which he calls Pi-lo-mo-lo. Supposing the bearing and distance correctly given, or nearly so, we come far into Rajputana, near to Jessalmer. We have no authority for applying Gurjara to any country in this direction, but the name is not uncommon, and we have a Gurjara still more to the north. Pi-lo-mo-lo has been identified, by M. Reinaud, with the Pahlmahl of Albiruni, an important city, between Multan and Anhilwara, the Balmair or Bharmair of Marwar, according to M. de St. Martin, about thirty leagues south-west of Jessalmer, a not improbable identification.

A sudden return to the south-east brings Hiouen Tshang, after a journey of 2800 li (560 miles) to U-che-yen-na, which is clearly Ujjayini or Ougein, the king of which was a Brahman, and consequently Buddhism was at a low ebb. He then goes to Chi-ki-to, north-east 1000 li, considered to be the modern Khajuri, twenty-five leagues south-west of Gwalior: thence, in the same direction 900 li, to Mo-hi-chi-fa-lo-pu-lo, which M. de St. Martin identifies with Macheri, perhaps Matsyavara, in support of which conjecture it is to be remembered that this part of India is known, in Sanskrit geography, as the Matsyadesa. Little is said of these two principalities, as they were both ruled by Brahman princes, and did not follow the faith of Buddha.

Departing from hence Hiouen Tshang returned to Gurjara, whence he again set off towards the north, and, after passing, for 1900 li, through wild plains and dangerous deserts, he crossed the river Sin-tu, the Sindhu or Indus, and entered the kingdom so called. The capital is named Pi-shen-po-pulo, which M. de St. Martin thinks may be identical with Alore, notwithstanding the dissimilarity of the appellations. According to Captain Burton, Middle Sindh is called Vicholo, which offers some resemblance to the Chinese. Sindh, according to Hiouen Tshang, was an eminently Buddhist country, having several hundred monasteries, with ten thousand monks. He does not give the bulk of them, however, a very good character, for he says "en général ils sont indolents et adonnés à la débauche." The predominance of Buddhism in Sindh, in the beginning of the eighth century, is noticed by the Mohammadans.

From Sindh Hiouen Tshang makes an excursion to a country he

calls Po-fō-to, Sanskrit Parvata. It is said to be subject to Chekia, which we have seen is in the vicinity of Lahore, so that Po-fō-to will be in the Punjab. This position is confirmed by the intervention of the kingdom of Meu-lo-san-pu-lo, Múlasthána-pura, or Multan. Besides the coincidence of the name the city is particularised as the site of a magnificent temple of the sun, having an image of the sun in gold. This entirely agrees with the notice I have translated from the Bhavishyat Purana, and all Hindu tradition, which records the foundation of the temple and the consecration of a golden image of Aditya, by Sám̐ba, the son of Krishna, in gratitude for his being cured by him of the leprosy.

Although it is not so stated, Hiouen Thsang must have returned from the Punjab to Sindh, as he departs from thence, and going 1500 or 1600 li south-west, comes to A-tien-po-chi-lo, which is equivalent, in M. Julien's system, to Adhyavakila, the capital of which is Khietai-shi-fa-lo, Khajiswara. It is situated near the sea, and the direction and distance would bring it well enough to Karachi. How that name should properly be written or what it means we have not learned, and the verification of the names must be left in doubt. The same applies to the adjacent kingdom, Lang-kie-lo and its capital, Su-neu-li-shi-fa-lo, Suuuriwara. The country, it is said, is subject to Po-lo-see or Persia. Lang-kie, M. de St. Martin thinks, may be traced in the tribe of the Langas or Langháü, still in the north-east of Baluchistan. The Langalas are also named in the Mahábhárata, but, as M. de St. Martin observes, we know nothing of the past and not much of the present condition of the countries west of the Indus, and should scarcely be able to follow the traveller, even if his steps were more precisely marked, but this part of his journey is very meagre and confused, and the accounts given of it in the biography and the Si-yu-ki irreconcilably at variance.

Hiouen Thsang's account of the next kingdom, Po-se, Po-lo-se, or Persia, is not from personal observation; the expression is not *à l'arrivée*, but *on arrive*; he calls the capital Su-la-sang-ten-na, Surasthána. He is correct in giving a good extent—several tens of thousands of li—to its confines, and representing it as a wealthy and prosperous country: he speaks also of their irrigation by canals, the kariz of Persian agriculture, and, curiously enough, mentions that they use large pieces of silver money, a not incorrect description of the broad silver coins of the Sassanides. He calls their chief deity Ti-na-po, which might be intended for Dina-pá, the guardian of the day, the Sun.

We cannot identify his steps as he advances from Sindh to the north—first, 700 li (140 miles) to Pi-to-shi-lo; 300 li north-east to

O-fan-cha ; 400 li further north-east to Fa-la-na, which is said to be subject to Kia-pi-she, so that we are now again near to Kabul ; 2000 li (400 miles) farther, after crossing a mountain and a deep valley, he quits the frontiers of India and enters the kingdom of Tsao-kin-cha, which M. de St. Martin thinks may offer traces of Rokhaj, the ancient Arakosia. We can scarcely doubt that the capital, Ho-si-mo, is intended for Ghazni, although it is doubtful what can be made of the second capital, which Hiouen Thsang calls Ho-su-lo. The name offers an obvious affinity to Hazara, and possibly the people so called may have been settled in this part of the country at the time of Hiouen Thsang's journey.

That the difficulty of verifying the traveller's course depends very much upon our imperfect acquaintance with the countries, is rendered probable by the comparative facility of verification when we know where we are ; the bearings and distances which bring Hiouen Thsang to Hu-pi-an, the capital of Fo-li-shi-lang-na, conduct him to the city that still bears the same name, or Hupian, to the north of Kabul, at the foot of the Hindu Kosh, first made known to us by Mr. Masson, and which has borne a similar appellation for 2000 years, being the Alexandria Opiana of Stephanus of Byzantium, and one of Alexander's military colonies. The country, M. St. Martin thinks, may be recognised in Varda-sthana, the place or region of the Vardaks, one of the principal Affghan tribes, a name that may be also recognised in the classical Ortospaia, or more correctly Orto, or Varta-sthana.

Hiouen Thsang now takes leave of India and threads his way back to China through Turkestan and Mongolia, by a route similar to that travelled by Marco Polo some six centuries later. We have not the same interest in keeping him company, but it is very curious to observe how successfully his route may be traced. The first place of note he comes to is An-to-lo-po-lo, or Anderab ; thence he comes to Ku-o-si-to, the Khost of Baber ; Hai-o, the next place, is not verifiable ; but Mung-kien is probably Mungan ; in Ki-li-se-mo we may have the Scassem of Marco Polo, the Ishkasham of Elphinstone's map.

Proceeding up the valley of the Oxus, Hiouen Thsang comes to Pe-li-hor, or Bolor, 800 li (80 miles), about the actual distance of Bolor from Ishkasham ; we then come successively to Hi-mo-ta-la, which wants an equivalent ; to Po-lo-choang-na, or Badakhshan, to In-po-kien, south-east, more correctly north-east, 200 li to Vakhan ; the next place is Khiu-lang-na, which may be Garanu, where the Lapis Lazuli mines are situated ; then Ta-mo-sie-tie-ti, or Chin-kan, the capital of which is Heen-to-to, or Kandahar, on the left bank of the Oxus.

After a painful journey 700 li north-east, Hiouen Thsang passes

across snow-clad mountains to the valley of Po-miu-lo of great extent, the centre of which is occupied by a spacious lake, the table-land of Pamir, and the Sir-i-kol; thence over similar country the traveller comes to the kingdom Khie-pan-to, of which the direction and distance correspond with the site of a city called, by the Kirghis, Kar-chu; from thence he proceeds to Kie-sha, or Kashgar; the next stage U-sha corresponds as to direction, distance, and its position at the descent from the mountain region, with the present city of Ingashar; 500 li from hence south-east he comes to Cho-kia-kia, agreeing in position as well as appellation with Yar-kiang, or Yarkand; a still closer affinity identifies his next advance, as Kiu-sa-tan-na, the Sanskrit Ku-stana, is no doubt intended for Khoten.

Khoten was, from a remote period, a celebrated seat of Buddhism, and Hiouen Thsang has many sacred shrines to visit and marvellous legends to relate. One of these, the destruction of the weapons of an invading host, by a colony of rats, whom the king of Khoten had propitiated, is similar, as remarked by M. de St. Martin, to the story told by Herodotus, in his second book. Another story narrates the surreptitious introduction of mulberry plants and silk worms into Khoten, by a Chinese princess married to the king, and the consequent celebrity of Khoten for its silk manufactures.

From Khoten, Hiouen Thsang pursues his homeward route, across territories which he merely names, as Tu-lo-lo or Tukhara, Ni-mo and Na-po-po, or Leü-lan; the latter, according to Chinese authority, corresponding with the direction of Makai, on the south-west of the province of Sha-chen. He was received, on his return, with especial honours, by order of the emperor, to whom he was presented at Lo-yang, and by whom he was ever afterwards treated with marked veneration, having accomplished a wonderful journey of at least 15,000 miles out and home, besides the digressions which he so frequently interposed.

Hiouen Thsang rarely indulges us with any personal adventures; he never complains of any ill-treatment or obstruction. The only impediments he encounters are those of country and climate, mountains, deserts, forests, cold and heat; and it is remarkable how little inconvenience he seems to have experienced. He speaks of robbers, but does not seem to have fallen in with them; and it is worthy of notice that they appear most frequently in India, not in Mongolia or Turkestan. In no part of his route does he seem to have suffered from any deficiency of supplies. Apparently he travelled alone or with a few occasional companions; he never speaks of caravans. Much of his personal immunity from danger and facility of movement was no

doubt attributable, at least in his outward journey, to his appearance as a religious mendicant, with nothing but his staff, wallet, and water-pot to be deprived of, and he obtained provisions and frequent resting-places at the Buddhist monasteries on his route, which, although sometimes few and in decay, were never totally wanting wherever he went. On his return, however, he could not have travelled in so unnoticeable a condition, for he brought back with him five hundred packages of books, besides images of Buddha and various sacred relics constituting the burthen, it is said, of twenty-two horses,—a sufficiently imposing cavalcade. By what means and at whose expense he effected this conveyance is not mentioned; but it affords a remarkable proof of the civilized condition and orderly government of the countries which he traversed, that he should have passed over so long and arduous a route thus heavily incumbered without incurring, as far as appears from his narration, any sort of impediment or ill-usage.

It is much to be regretted that our enterprising pilgrim should have devoted his inquiries so almost exclusively to the objects of his superstitious veneration, and have entered so little into details we should have infinitely preferred, respecting the social and political condition of India. His notices of this nature are rare, scattered, and meagre, but there are a few which are not without interest, and there is a general description which is in the main correct. I purpose a further investigation of this part of his travels when I have leisure, and shall submit the result to the Society at some future opportunity.

ART. V.—*Supplementary Contributions to the Series of the Coins of the Kings of Ghazni.* By EDWARD THOMAS, Esq., Bengal Civil Service.

[Presented 19th March, 1858.]

IN the volume of the Journal of the Royal Asiatic Society for the year 1848, is to be found a paper descriptive of such coins of the Sultans of Ghazni as chanced to form part of the varied numismatic accumulations of Mr. Maasson, gleaned, under his personal superintendence, chiefly to the northward of the metropolitan province from which the dynasty takes its name.

Since the date of the publication in question, political events, in placing our Government in possession of the entire Indian section of the dominions of the successors of Mahmūd, have necessarily facilitated the acquisition of specimens of their local currencies by the civil and military officers stationed in those parts. The opportunities thus offered, though but moderately taken advantage of,¹ have been the means of bringing to light several novel and interesting accessions to the general series, a record of which may be appropriately inserted in this Journal, in supplementary continuation of the previous memoir.

In addition to a description of the more prominent recent acquisitions of Mr. E. C. Bayley, Col. T. Bush, and others, there will be found embodied in the following pages full references to the Ghaznavi coins of the late Col. Stacy, a notice of which appeared in the Jour. As. Soc. Bengal for 1852².

The Roman numerals, prefixed to the ordinary consecutive numbers in the subjoined catalogue, serve to indicate the class, in the original series, to which each new specimen belongs. Where the words "to follow or precede" are added, it is to be understood that the coins so marked are novelties, of which extant examples were unavailable at the period of the publication of the earlier memoir. At the conclusion of the Ghaznavi *proper* suite, a list of the various dates and places of mintage referred to in either paper has been incorporated in a tabular form; and, following out the plan adopted on the previous occasion, a brief appendix has been devoted to the illustration of such pieces of the Ghori and other succeeding dynasties as circumstances have intermediately placed within reach.

¹ If Col. J. Abbott's collection—formed on the eminently favourable soil of the Hazarah country—prove as rich in Ghaznavi treasures as the choice specimens of his Bactrian series may lead us to expect, the numismatic history of the house of Subuktigin will be greatly enriched.

² Vol. xxi. p. 115.

For facility of reference a reduced Table is prefixed, exhibiting a list of the Ghaznavi Sultáns, associated with their early Sámání Suzerains, and the contemporary Khalífs of Baghdád, to whom they throughout professed spiritual allegiance.

The Ghaznavi Dynasty, together with their Contemporary Suzerains, Spiritual and Temporal.

Khalífs of Baghdád.	Dates of Accession.			Kings of Ghazni.	Sámání Suzerains.		
	A.H.	A.H.	A.D.		A.H.	A.D.	
Al Muti' billah abdicates, Zi'l Ka'dah, 363	334				331	943	Núh bin Nasr
		351	962	Alptagín	343	954	A'bd-ul-Malik bin Núh
		359	969	Ishak	350	961	Mansúr bin Núh
Al Tá' billah deposed by Bahá al dowlah (Sha- bán), 381	363				365	976	Núh bin Mansúr ¹
Al Kádír billah died, Zi'l Hajah, 423	381	387	997	Isma'íl	387	997	Mansúr bin Núh
		388	998	Mahmúd	389	999	A'bd-ul-Malik bin Núh. (Ailek Khán enters Bukhárá on the 10th of Zi'l Ka'dah, A.H. 389, end of the dynasty.)
		421	1030	Muhammad			
		421	1030	Masa'úd			
Al Káim beamrill- lah, died 13 Sha- bán, 467	422	432	1040	Muhammad			
		432	1041	Módád			
		440	1048	Masa'úd II.			
		440	1048	Abúl Hasan A'íl			
				Bahá al dowlah			
		440	1048	A'bd-ul-Rashíd			
		444	1052	Toghral			
		444	1052	Farukhád			
		451	1059	Ibrahím			
Al Muktafi beam- illah, died 15 Muharrim, 487	467						
Al Mustashar bil- lah, died, 16 Rabí' al Akhír, 512	487	492	1099	Masa'úd III.			
		508	1114	Shírzád			
				Kamál al dowlah			
		509	1115	Arslán			
Al Mustarshid bil- lah, killed, 17 Zi'l Ka'dah, 529	512	512	1118	Bahrám Sháh			
Al Ráshid billah	529						
Al Muktafi lea- merillah, inang., 12 Zi'l Hajah, 530	530						
Al Mustanjid bil- lah	555	547	1152	Khusrú Sháh			
		555	1160	Khusrú Malik.			
				(Final surrender at Láhór, A.H. 583)			

¹ By some authorities his accession is placed in the month of Rajab, A.H. 366.

The earliest novelty, among the more recent acquisitions, is highly interesting in an historical point of view, as it illustrates an introductory phase of the Ghaznaví independence, regarding which the records of the house of Subuktágin are usually defective; and though it may be difficult to reconcile the circumstances under which the piece purports to have been issued, with the imperfect materials preserved by written testimony, yet the numismatic appearance of the name of the chieftain Bulkátágin, in accord with the circumstantial mention of his elevation to power by so trustworthy an authority as Abú'l Fazl Baihakí¹, gives weight to a passage previously quoted, and for which I had already claimed mature attention², without at the moment being fully aware of the merits and singularly favourable opportunities of the writer from whose more voluminous works it had been abstracted and incorporated into the pages of the *Tabakát-i-Násirí*³.

¹ "Tárikh A'l Subektegín, Historia magna Ghaznavidarum pluribus voluminibus comprehensa, Auctore Abu'l Fadhl Al Beihacki."—Flügel's *Háji Khalfa*. See also notices of this author in my earlier paper, *J.R.A.S.*, ix. pp. 277, 331, 376.

² In quoting the Persian text of the original passage in 1847, I remarked:—"The subjoined account of the succession to Alptágin's chieftainship is given entire from the *Tabakát-i-Násirí*, as offering a version of the question to which it refers widely differing from that to be found in the writings of the more generally known authors; and although there are many objections to the unqualified admission of its verity, yet the *Násirí*'s undoubted antiquity and usual accuracy entitle the statement to full consideration." (*J.R.A.S.*, ix. 303.) At the period when this extract was made, I was ignorant of the remarkable facilities and advantages enjoyed by the author from whose works the *Tabakát-i-Násirí* reproduces the statements embodied in the text. We still only know Abú'l Fazl Baihakí by one of his many works; the "*Tárikh-i-Masa'údí*," being the only one of the series which seems to have been preserved to us; but taking that production as a specimen of the whole, we have indeed reason to regret the loss of the remainder. Oriental students will be glad to learn, that the Persian text of the "*Masa'údí*" is already prepared for publication, and is expected to appear under the editorship of Mr. W. H. Morley.

³ The *Tabakát-i-Násirí* was completed in A.H. 658. The author, Minháj us Suráj Juzá'í, composed his work at Dehlí, dedicating it to Násir ud dín Mahmúd, the reigning Emperor of Hindustán. See *ante*, Journal, ix. pp. 377, 304. *Háji Khalfa* (vol. iv. p. 153) has the following note regarding this work:—

٧٩٢٨ طبقات الناصري فارسي لمنهاج بي معروف بسراج

الجرجاني المتوفى سنة الله في غزوات ناصر الدين محمود

شاه بن ايلتمش الدهلوی

"No. 7928. *Tabakát el Násirí* classes *Nasirica* Auctore Minháj Jorjáni filio ejus, qui vulgo Siráj dictus est anno—mortuo; Historia Persica, quam de expeditionibus bellicis Nasir ud dín Mahmud Shah ben *Iltímish* Dehlewí composuit." See also Stewart's Catalogue, No. xi. p. 7; and Mr. Morley's Catalogue of the Roy. As. Soc. MSS., No. xii. p. 21.

The Persian text of the passage in question having been inserted in a former number of this Journal, I content myself, on the present occasion, with appending an English translation of the same, adding however the introductory portion of the chapter, explanatory of the primary source of the information secondarily preserved in the work of Minháj us Siráj :—

“Imám Abúl Fazl Baihakí relates, that Nasr Hájí, a merchant in the time of A'bd-ul-Malik bin Núh Sámání, bought Subuktagín and brought him to Bukhárá. Alptagín, who was then Amír Hájib, observing the signs of intelligence and manliness on his forehead, purchased him. He accompanied Alptagín to Tokháristán and followed him, when he was promoted to the government of Khorásán. Alptagín, in the course of events, proceeded against Ghazní, conquered Zábulistán, and took Ghazní from (the) *Anúk*¹. Dying eight years afterwards², his son Ishák succeeded him ; and in a battle with (the) *Anúk*, was defeated, when he proceeded to Bukhárá, and, having obtained assistance from the Amír Mansúr bín Núh, recovered Ghazní. And after one year, Ishák died. They then raised to the throne Bulkátagín, who was the chief of the Turks ; he was a just man, and eminent for his piety among the warriors of the world ; he reigned two³ years and then died ; Amír Subuktagín was in his service, and, after Bulkátagín, Amír Pírí became king ; he was a very ill-conditioned man. A party at Ghazní entered into communication with Abú A'lí *Anúk*, and sought assistance from him. Abú A'lí *Anúk* brought, as an ally, the son of the King of Kábul ; and when they reached the confines of Charkh⁴, Amír Subuktagín, with five hundred Turks, fell

¹ The word is variously written in the different MSS. as *لویک* and *انوک*. The former is adopted in the East India House MS., the Paris copy, and that of Gen. Brigg's now in the library of the Royal Asiatic Society. I propose, with but slight hesitation, a rectification of the orthography to *لنیک* or “*Lumghán*,”

the Lampage of classical writers ; the *لنیکا* (وهولمان) of the Unpublished MS. ; *Kánún-i-Masa'údí* of Albírání ; and the *اهل لنیک اعنی لمغان* of the same author as quoted by M. Reinaud ; *Fragments Arabes et Persans* ; Paris, 1846, p. 131. See also Erskine's *Memoirs of Báber*, p. 143 ; and M. St. Martin (p. 298), *Mémoire Analytique sur la Carte de l'Asie Centrale et de l'Inde*, appended to M. Stan. Julien's *Mémoires sur les Contrées Occidentales*. Hiouen-Thsang, (Paris, 1858).

² “Eight years” is the time given in all the MSS.

³ Two copies, out of the three I have at this moment the opportunity of consulting, give *دو* *ten* instead of *دو* *two* ; the former, however, is a palpable error.

⁴ The name of this place varies in the different MSS., appearing in the several copies as *جرج* and *جرج*. Col. W. Anderson, C.B., of the Bengal

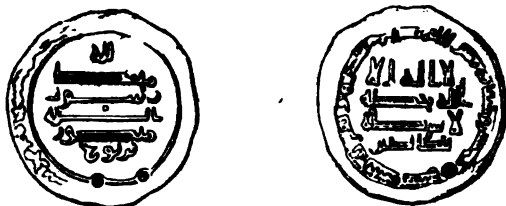
upon them, and routed them, killing a vast number and making many prisoners; he took also two elephants, which he brought to Ghazni. After achieving so great a victory, the entire population being disgusted with the iniquity of Piri, with one consent raised Subuktagin to the throne, on the 7th of Sha'bán, in the year 366."

I now proceed to cite the new piece, which we owe, together with other important medals of this series¹, to Russian enterprise²; and it is further to the credit of the Government of that country, that these occasional discoveries continue to receive explanation and illustration from so sound an Oriental scholar as Prof. Dorn, the worthy successor of M. Fræhn, whose "*Recensio Numorum Muhammedanorum*"³ to this day forms our most valued text-book in cognate studies.

The following is a translation of M. Dorn's remarks on the coin, together with a fac-simile of the woodcut engraved in the *St. Petersburg Journal* :—

No. 1 of this Supplement.

"No 4^e. Mansúr bin Núh. Ghazna. A.H. 359 = A.D. 969.
One of the most valuable of the inedited coins.



"*Obverse.*—Under the symbol : بلکاتگین (Balká, ' or 'Bulká-Tagin.'

Artillery, who has served in Afghánistán, and given much attention to the geography of the country, identifies the locality with "Cherkh," which is mentioned in the *Ayin-i-Akbari* as "one of the dependencies of Toomán Lahooker (Lohgar)." *AA.* ii. p. 181. Báber had previously furnished this indication, in his *Memoirs*, to the effect, "Lohnger (Lohgar) is another Tumán, the largest town of which is Cherkh. . . . Cherkh has numerous gardens, but there are none in any of the other villages of Lohnger. The men are *Aughán-Shál*."—*Erskine's Memoirs*, p. 148.

¹ See important coin of Alptagín, *J.R.A.S.*, ix. p. 295, &c.

² The descriptive article is headed, "*Vierzehn unedirte Samaniden-Münzen*;" von P. Saweljew (*Lu* 10 Mars, 1854)."

³ *St. Petersburg*, 1826. Prof. Dorn has lately published the first portion of M. Fræhn's Posthumous Works (*St. Petersburg* 1855).

⁴ *Bulletin de la Classe Historico-Philologique de l'Académie Impériale des Sciences de Saint-Petersbourg*, tome xii. (A.D. 1855) p. 90.

"*Margin.* — ثلثمائة و خمسين The name of the mint *عرب* can stand for nothing but 'Ghazna.' This city appears here for the first time in the Numismatic Series of the *Simánis*. It is known that at the accession of the young *Mansúr* [350 A.H.], *Alptagín* rose against him in Ghazna, defeated his army twice, and declared himself independent. History mentions only the conquest of *Alptagín*, but is silent in regard to the rule of the *Sámánis* in Ghazna.

"We see from our coin that *Balká*, or *Bulká-Tagín*, in the year A.H. 359 was chief of the *Sámání* party in this city. His name appears already on the *Balkh* coins of A.H. 324 (v. *Recensio*, p. 569, No. 229, d.)¹. Subsequently he passed over to *Alptegín's* cause, became Chamberlain under *Abú Ishák*, and is said to have ascended the throne after the death of the latter in A.H. 365. (*Fræhn*, Bull. Hist. Philol., iv. 15¹.)

"*Reverse.*—On the reverse the name of the *Khalíf* is wanting :

لله محمد رسول الله منصور بن نوح

"(Dug up by me in the year 1853 at the village of *Kabanskoi*, in *Wladimir*.)"

Having exhibited the data, both historical and numismatic, bearing upon the chieftainship of *Bulkatagín*, I have now to advert to the difficulties which present themselves to any very conclusive reconciliation of the indications derived from these diverse sources. The

¹ The following is Prof. *Fræhn's* description of this coin :—

"No. 229, d. *Rariss. Notabilissim. cus.*

ببلغ سنة اربع (و) عشرين و ثلثمائة
in Balch a. eod. 324

A. ii. p.p. نوح بن نصر يوسف Nuh fil. Nasri || Jusuf.

A. ii. p.p. الراضي بالله نصر بن احمد Er. Raszi-billah || Nasr.
Silius Ahmedis.

Inf. eat nomen, quod بللكى . . . tegin referre videtur.—*Recensio*, p. 569.

² I have been unable to discover the authority for this statement under the reference indicated; but, assuming that *Fræhn's* *Neue Sammlung* (Leipzig, 1844, p. 124) contains the full reprint of his original paper, I must conclude that the date of A.H. 365, here given, is an interpolation of *M. Dorn's*, for which Prof. *Fræhn* is not responsible. The latter author does not specify from what source he derives his historical information, hence further means of comparison in this direction are denied me.

abstract of Baihaki's narrative, given by Minháj us Siráj, will be seen to be meagre and unsatisfactory in the extreme; and although we gain references to events, of which we had previously no knowledge, yet they are so imperfectly described, that we are but little advanced in exact history by the information thus contributed. The extreme period to be filled in with the details furnished by our author, may be taken broadly as the fifteen or sixteen years, from 350-1 to 366 A.H., often erroneously assigned by later compilers¹ as the duration of the sway of Alptagín. The first point towards the arrangement of the dates of accession of the succeeding potentates that it is necessary to determine is, from what epoch Minháj us Siráj calculates the eight years' reign of the chieftain in question. It can scarcely have been designed that any portion of the period of his submissive government of Khorásán should be included in this term; nor does it seem needful to infer that his quasi-independence should date only from the moment of his gaining possession of the city of Ghazni², which however celebrated in after times as the capital of a powerful empire, could have been of little note or importance on its first capture from the local princes. In the absence of anything positive on this head, it may be assumed that the early portion of the year A.H. 351³, witnessed the

¹ See the various authorities quoted at the foot of p. 298, Jour. R. A. S. vol. ix. Also Mirkhond, *Histoire des Samanides*, edited and translated by M. Defrémery, Paris, 1845, pp. 164, 166, and note, p. 263; likewise Price, quoting the *Khalásat al Akhbár*, ii. 277.

² Ibn Haukal, who had every means of knowing the facts connected with the early conquest of this city, would seem to imply that it was not occupied as a capital by the Muhammadans till 365 A.H. See St. Martin, *Mémoires sur l'Arménie*, ii. 21. Reinaud, *Mémoire sur l'Inde*, p. 244; and J.R.A.S., ix. p. 286, note 2.

³ Ferishtah definitively places this revolt in A.H. 351; the expressions made use of are—

در سنه احدى و خمسين و ثلث مائة علم طغیان افراشته

See p. ۳۱, Bombay Lithographed Edition.

The *Tárikh-i-Guzdáh* gives "six years" as the interval that elapsed between Mansúr's accession and Alptagín's revolt; if we correct the years into months we obtain a more probable period. (See MSS. *Tárikh-i-Guzdáh*, E. I. House Library, Nos. 80 and 649.)

[Since the above note has been set up in type, I have had an opportunity of examining Colonel Sir H. C. Rawlinson's MS. copy of the *كامل التواريخ* of Ibn Athíř. Under the miscellaneous heading of the year 351, appears, seemingly, the first mention of Alptagín, as reproduced in the subjoined passage, whence it will be seen that Mansúr did not call upon Alptagín to appear at Bukhárá till the third month of A.H. 351. It is a matter of regret to me that

estrangement of Alptagín from the newly-elevated successor of A'bd-ul-Malik¹. Under such a scheme of computation, Alptagín's death may be placed early in A.H. 359, or in the very year, a record of which appears on the coin of Bulkátagín². Our text, in the form in which it at present exists, certainly does not support the conclusion that Bulkátagín arrived at regal power so speedily as this; but circumstances stated by other authors—though with far less clearness than might be desired,—seem to suggest a possible solution of the difficulty. Abú Ishak's own position at the moment of the death of his father, is not well ascertained; if, as is stated by some writers, he was then employed in Khorásán³, Bulkátagín may well have taken temporary

Colonel Rawlinson's copy of this rare work ends with the annals of A.H. 363, while the published edition of Thorneberg (1851-53) commences only with the year 327, (being continued on to A.H. 628).

في هذه السنة [أحدى و خمسين و ثلثمائة] في ربيع الاول ارسل
الامير منصور بن نوح صاحب خراسان و مارا الزهر الى بعض قواده
الكبار و اسمه الفتكين ليستدعيه و امتنع فانفذ اليه جيشا فلقبهم
الفتكين فجزهم و اسر وجوه القواد منهم و فيهم خال منصور

Hájí Khalfá notices the Kámil ul Tawárikh to the effect:—"No. 9733. Kámil ul tewárikh, liber historiarum perfectus. Tredecim volumina, auctore Sheikh Iz-ed-dín A'li ben Mohammed Jezeri, vulgo Ibn-elathir dicto et anno 630 (inc. 18th Oct., 1232) mortuo. Incepit ibi a rerum initio, et ad annum 628 (inc. 9th Nov. 1230) progressus est." V. 25.]

¹ A'bd-ul-Malik died in Shawál, or the tenth month of A.H. 350. Abú Fida, *Annales Muslemici*, Reiske (1790) ii. 470.—"11th Shawál, 350."—*Kitáb Yamíní*, p. 270.

² In this redistribution of the intervening epoch, it is of course necessary to reject all notion of the Ferwán *Toghrá* coins, Nos. B, C, D (Jour. ix. 201-2), of the years 365 and 366, having formed part of the Mint issues of Alptagín; nevertheless they may still be taken to have constituted a portion of a serial coinage, based upon models of earlier introduction, continued under his auspices and retained by his successors after him. Such an amended theory is likewise demanded by the numismatic evidence recently brought to light, which explains satisfactorily the otherwise anomalous reiteration of the name of Naṣr bin Ahmad throughout the series. As he is shewn by M. Dorn's coins (*Samaniden-Münzen von P. Saweljew*, St. Petersburg, 1865, Nos. 11, 12, 13) to have been the first to adopt and introduce into Mint use the distinctive motto of نصر من الله و فتح قريب on the occasion of the victory of his army over the Delemites at Muhammadia (Raí) in A.H. 329.

³ Ibn Khaldún, as quoted by M. Defrémery (p. 263) affirms—"Alptéguin était au nombre des affranchis des Samanides et gouverneur de Ghaznah et du Khorácan. Son fils, Abou-Ishac, était son lieutenant dans cette dernière province, et comptait Sébuctéguin parmi ses serviteurs. Il l'investit du poste de chambellan. Abou-Ishac se rendit à Bokhara sous le règne d'Alésid-Mançour, fils de Nouh.

possession of the government of Ghazní, and in virtue of his office availed himself for a time of the kingly prerogative to coin money, relinquishing both power and place on Abú Ishak's formal investiture by the court of Bokhárá, to whom, strange to say, his own coin proves the local authorities of Ghazní still continued to profess allegiance¹. Bulkátagin's status as chief of the Turks, which subsequently availed him on a like occasion, may reasonably have simplified this earlier

Sébuqtéguin remplissait alors les fonctions de chambellan auprès d'Abou-Ishac. Alptéguin mourut à Ghaznah, et son fils Abou-Ishac fut envoyé dans cette ville pour le remplacer. Il mourut peu de temps après son arrivée." U'tbi, in his Kitáb i Yamín, under the authority of Abú Hasan Kházin, also mentions Abú Ishak as commandant of the forces in Khorásán, from which post, the text would seem to imply that he was promoted direct to the government of Ghazní. See M. de Sacy. Notices and Extracts, iv. 330, and translation of the same work, likewise from the *Persian* version, by the Rev. J. Reynolds. O. T. F., London, 1858, p. 22.

As there was some discrepancy to be detected between the French and English versions of this important quotation, and as each pretended to be no more than a mere translation of a translation, I thought it worth while to refer to the original Arabic text; and, having collated the excellently written M.S. in the British Museum, with a very elaborately commentated lithographed edition, printed at the Delhi Madriśa, I sought the assistance of Mr. H. T. Prinsep in securing an accurate and independent rendering of the somewhat obscure passage. The result is appended below.

"This account of him [Subuktagín] was related to me by Abú Hasan Ja'far, son of Muhámmad the Treasurer,—'That he [Subuktagín] came to Bukhárá in the days of the good Amír Mansúr Bin Núh, in the suite of Abú Ishak, son of Alptagín, who was commandant of the armies of Khórásán. Then (literally, when he, Abú Ishak, was that)—he [Subuktagín] was his [Ishak's] Hajib Kabír, or Master of the Ceremonies. And he had a noble countenance, and the burthen of Ishak's affairs was on him, and the management of all his business was in his hands. The nobles of that state (i.e. Bukhárá) remarked in him the qualities of high courage and kindness of disposition and generosity, with energy and promptitude, and anticipated for him a career of exaltation because of his high aspirations and acuteness. At the time of Abú Ishak's return to Ghazní, as Váli and chief in his father's place, he [Subuktagín] returned with him in the suite,—that is, in command of his troops, and discharging the duties of the chamberlain's office. But Ishak, very soon after his return, finished his career and lost his life, leaving none of his race or kin fit for his position and place. Then a number of his [Ishak's] servants and of those of his father were in great anxiety and trouble as to the succession to the chiefship and [the choice of] a person in whose good management of all parties they could confide; and they did not cease differing about the chiefship and quarrelling about relative fitness, until at last, by the assent of all voices, it was agreed to make him [Subuktagín] the Amír; and all opinions combined to approve his arrangements and to obey his orders for bringing forward or postponing."

¹ As I have already remarked in my first paper, a parallel system of recognition of the Sámání lords of Bukhárá was seemingly maintained on the Ghaznaví currency up to the date of the extinction of the suzerain dynasty. See J.R.A.S. ix. 26¹, and coins Nos. 9, 10, 22, 23, &c., old series.

step towards sovereign power, some of the functions of which he must already have exercised elsewhere, if the coin above cited and struck at Balkh in A.H. 324, refer to the same individual.

Passing by the special question involved in the superscription on the coin, and following the compiler, for whom, in virtue of the authority cited, credence is claimed, it will be seen that with the exception of the relative date of Abú Ishak's death, a year after his return to Ghazní, there is nothing definite whereby to fix the duration of his rule, either as nominal or effective sovereign of that state; and equally that the two years' *authorized* reign of Bulkátagin, is dependent for its epochal justification upon a definition of the limits of those of his predecessors; or, if more exact information were afforded, upon a determination of the period over which the seemingly short-lived power of Piri extended prior to the fixed date of Subuktagín's formal accession on the 7th day of the 8th month of 366.

The illustrative novelties next in order of date do not properly belong to the Ghaznaví series, but the prince whose name they bear is so closely identified with the early progress of both Subuktagín and Mahmúd, until the time when he finally becomes the vassal of the latter, that his independent coinage in Seistán forms a proper introduction to the mintages of his conquerors in the same province, of which specimens have already been given in the pages of this Journal¹.

The biography of Khalaf bin Ahmad is largely dwelt upon by contemporary writers, and especially by U'tbí, the author of the Kitáb-i-Yamíní, from whose work the following sketch of the life of this remarkable character has been chiefly drawn :—

Note on the Life of Khalaf bin Ahmad of Seistán.

Some obscurity exists regarding the precise descent of Khalaf bin Ahmad², but it may be sufficient for our present purpose to recognise a relationship to certain members of the extinct dynasty of the Saffarís, to the possession of whose metropolitan province he succeeded, after its intermediate subjection to the Sámání Empire of Bokhárá.

¹ J. R. A. S., ix. p. 326, No. 48.

² *Rauzat-as-safá*, vol. iv. c. 14. I quote from the Persian MS. of the R. A. S. No. xxv., as I have not been able to meet with the Vienna translation. "Historia priorum regum Persarum, ex Mohammede Mirehond. Persicè et Latine, 4to Viennæ, 1782." See also Habib-us-Siyar, vol. ii. c. 4. (Bombay lithographed edition, 1857), and Price, quoting Khulâsat-al-Akhhâr, "Mohammedan History, London," 1821, vol. ii. p. 243.

He is first noticed in the *Tárikh Yamíní*¹, on the occasion of his undertaking a pilgrimage to Mekka in A.H. 354², when he leaves his kinsman Táhir Ibn Hussain in charge of his dominions. The latter plays him false during his absence, and on his return he finds his own kingdom closed against him. On Khalaf's obtaining³ aid from Mansúr bin Núh, Táhir relinquishes his position; but on the withdrawal of the Suzerain's troops, he again asserts his supremacy. Khalaf, for the second time, seeks succour from Mansúr, and thus reinforced, besieges Hussain bin Táhir⁴—who in the interval had succeeded his father—in the fortress of Ark⁵. Hussain, on an appeal to Mansúr, is allowed a safe conduct, and Khalaf is reinstated in his dominions. Years roll on, and he himself in turn is found failing in allegiance to his Sámání lord, when, strange anomaly, this same Hussain bin Táhir is sent to subdue him, but wastes seven years ineffectually in the siege of the citadel of Ark⁶, till at last Abúl Hussain bin Simjúr, the

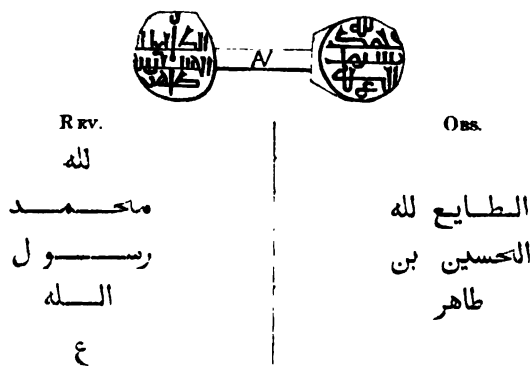
¹ Notices et Extraits des Manuscrits de la Bibliothèque Nationale, vol. iv. p. 336. Histoire de Yémineddoula Mahmúd (Kitáb Yémini), traduite de Persan, par A. I. Silvestre de Sacy; and also The Kitáb-i-Yamíní, translated from the Persian version of Ul-Utbi, by the Rev. J. Reynolds (Oriental Translation Fund), 1858, p. 51.

² Ibn Athífr, A.H. 353; Rauzat-as-sufa, A.H. 353; Habib-us-Siyar, A.H. 350.

³ In A.H. 353, according to the Khulásat al Akhbár. Price ii. 43.

⁴ The following coin of Hussain-bin-Táhir is to be found in Colonel Rawlinson's collection:—

No. A. Gold. Size 2. Weight 19 gr.—R. M.



Margin illegible.

⁵ Reynolds, p. 52. The name is not given by De Sacy.—Not. et Ex. iv. 337.

⁶ "Ark," De Sacy, iv. 337-8; and Kitáb i Yamíní, p. 59.—ارك Ibn Athífr. See also Histoire des Samanides, par Mirkhond, traduite par M. Defrémery, Paris,

Governor of Khorásán, is directed to interfere¹, and prevails upon Khalaf to retire, while offering apparent submission, to the castle of Táq (طاق)². The supremacy of the reigning emperor, Núb bin Mansúr, being duly recognised by the usual Moslem formalities of the recitation of his name in the public prayers, and its insertion in the legends of the coin of the realm.

On the resumption of U'tbí's narrative, Khalaf is stated to have remained in quiet possession of his territory up to the period of Subuktagín's expedition against Jaipál in 367 A.H.³, when he takes advantage of the opportunity to seize upon Bust and appropriate the treasures of the province; but even this overt act of treachery seems to have been forgiven by Subuktagín on the restitution of the funds thus temporarily alienated⁴. An event regarding which U'tbí remains silent seems to have occurred shortly after 379 A.H.⁵, in Khalaf's mission of his own son A'mrú to take possession of Kermán, where he obtains a momentary success, but is finally defeated by A'bbas bin Ahmad, the general of Samsám ud doulah, the Búiyah ruler of Fárs. On the son's return to Seistán, Khalaf—for no apparent reason but his want of success, puts him to death with the most uncompromising barbarity⁶.

Khalaf next appears on the scene as joining Subuktagín's force with his contingent, on that general's march to oppose Abú A'lí at Nishápúr. He himself is left behind, but his troops aid in the cam-

1845, p. 265. Col. Anderson supposes this name of Ark (the Greek *apx*) to be used for the citadel of Zaranj, the capital of Seistán. Under the description of that town in the *Ashkál al bilád*, we are told—"Inside the city, between the Kurkoonuh and Meeshuk gates, is a grand building called the *Urk*—it was the treasury of Omar." See Jour. As. Soc. Bengal, xxi., 365, 372.

¹ About A.H. 371. Price ii. 245. Defrémercy, p. 265.

² *Albírúnf Kánún MS.* حصن الطاق ف ت ل م — For طاق see also Onseley's *Oriental Geography*, pp. 208, 211, 212. T. H. Möller, *Liber Climatum*, (*Istakhrí*), Gotha, 1839, p. 103; and Col. Anderson's *Translation of the Ashkál al bilád's Account of Seistán*, Jour. As. Soc. Bengal, xxi. pp. 369, 371, and 373.

³ Dow's *Translation of Ferishtah*, i. 22. Brigg's ditto, i. 16. *Kitáb i Yamíní*, 43. Reinaud, *l'Inde*, 250. Malcom's *Hist. Persia*, i. 316.

⁴ *Kitáb i Yamíní*, p. 273.

⁵ R. S. iv. 15. On Samsám ud doulah Buiyah's accession to power at Shiráz, i. c. [about] 379 A.H. Abú Faraj, A.H. 379, p. 212. See also D'Herbelot in voce; and Price ii. 265, A.H. 387-98.

⁶ R. S. vol. iv. cap. 15. The *Habib us Siyar*, ii. 4, in commenting on his and a second similar murder, says—

. . . که دوپسر خود را بدست خود در آیام حکومت قتل نمود

paign; and on the final defeat of Abú A'lí and Faik at Tús in 385 A.H., Subuktagin sends back the Seistán force with honour and commendation. Khalaf's intriguing disposition again develops itself on Subuktagin's proceeding to the northward against Ailek Khán, though any positive rupture seems to have been averted till after the death of the Ghaznavi monarch, when Khalaf sends his son Táhir to annex certain dependencies of Bagrachak¹, Mahmúd's uncle, at this time ruler of Herát, &c. In an action which ensued, Bagrachak was killed; and eventually in A.H. 390², Mahmúd himself advanced into Seistán, where, however, he contented himself with receiving Khalaf's somewhat abject submission and a money fine³.

About the year A.H. 392 Khalaf abdicated in favour of his son Táhir. Subsequently, thinking better of this act, he treacherously inveigled his son into his power⁴, who thereupon meets a speedy end in his father's prison. The feelings of the nobles of the land at this incident are developed in a rebellion, ending in the deposition of Khalaf and the submission of the conspirators, in A.H. 393, to Mahmúd; while Khalaf, after standing a siege in his last refuge⁵, surrenders to Mahmúd⁶ with an ostentatious amount of self-humiliation sufficient to secure him once again the mercy of the conqueror, who provides him with an honourable exile⁷, which, after four years duration and the discovery of intrigues with Ailek Khán, is converted into close confinement, in which "the volume of his life received its last seal" in Rajab A.H. 399⁸.

¹ Dow, i. 51. Bujerse, Not. et Ex. Bagrachak. Arabic text, Táríkh Yamíní

بغراچق R.S. بغراچق

² A.H. 390. T. Y. p. 279.

³ Not. et Ex. p. 739. T. Y. 280.

⁴ T. Y. 285. Mirkhond does not adopt this preliminary statement of U'tbi's but he is quite clear as to the treachery, and adds—

و خلف نیز بدست خود کشته

⁵ R. S. Ták طاق. So also Price, K. A. 282.

⁶ Price dates this expedition of Mahmúd in 394 (p. 282, vol. ii.) D'Herbelot in voce, 393 A.H. p. 533. De Guignes, ii. 155, A.H. 393.

⁷ R.S. و او بسبب موافقت آب و هوا موضع جورجان اختیار کرد

H.S. جرجان De Sacy proposes to amend this to *Dhousdjan*. Not. et Ext. iv. p. 353.

⁸ The Khalásat ul Akhbár sums up his character thus:—"This Kholf, the son of Ahmad, is represented, at the same time, as equally adorned and distinguished by his acquirements in all the learning of his age and country, by the liberality and benevolence of his mind, and by his unbounded patronage of genius and science, however exhibited." Price, vol. ii. 243.

KHALAF-BIN-AHMAD.

No. 2.

Gold. Size 1½. Weight 8·5 gr.¹ A.H. 355.—*British Museum (Collection of Sir H. C. Rawlinson).*

REV.

محمّد
رسول
الله
ب

Margin. Illegible.

OBS.

المطيع لله
خلف بن احمد
عدل

Marg. خمس وخمسين وثلاث

[NOTE.—The following coins are noticed in this place,—in so much of association with the obvious money of Khalaf-bin-Ahmad forming part of the small collection from the same site, presented to the British Museum by Colonel Sir H. C. Rawlinson—without being definitely classed under the like heading and attribution, as objections may be taken to the absence of the patronymic so uniformly expressed upon the ascertained coins of this prince; an uncertainty exists further as to their places of mintage, and, finally, grave doubts must arise, in the absence of any historic testimony to the fact, as to whether Khalaf-bin-Ahmad could have attained kingly power so early as 381 A.H. It is true that he is represented as dying at a mature old age in 399 A.H.; but it would be, perhaps, claiming too much to infer that he had arrived at manhood and princely rank sixty-eight years previous to that event.

The names of the mint cities on these pieces are only partially legible; that on the coin engraved is seen to consist of a trilateral compound, and, looking to

¹ This coin has been engraved for the forthcoming number of the *Numismatic Chronicle* as No. 5, vol. xx. p. 56, to illustrate a paper on the special subject by Mr. Vaux.

No. 2 a.

Gold. Size 2½. Weight 18·5 gr. Sejestân.—*British Museum.*

Similar Areas, with the monogram ع at foot of Reverse Area.

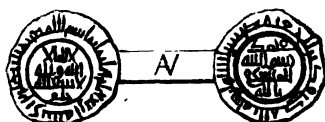
Obverse Margin displays portions of the Kalimah, viz. :—

. . . له وحده لا شريك .

The Reverse Margin retains the words بسم الله ضرب بساجستان

the identities of letters in other portions of the legends, the initial should preferentially be read as ر and the final as ل. The name of the town on the second piece I will not even venture to guess at.]

No. B.



Gold. Size 8. Weight 15 gr. A. H. 334.—*British Museum.*

Rv.	Obv.
محمّد	لا اله الا
رسول الله	الله وحده
المستكفي	لا شريك له
بالله	خلف

Obv. Marg. بسم الله ضرب هذا الدينار بر سنة اربع وثلث وثلثمائة

Reverse Margin. محمّد رسول الله ارسله بالهدى ودين الحق . . .

Kurán, Surah, ix. 33, and lxi. 9.

No. 3.

Gold. Size 8 (broken coin). Weight 29·5 gr.¹ A.H. 375.—*British Museum*.
Plate, fig. 1.

Rev.	Obv.
لله	لا اله الا
محمّد	الله وحده
رسول الله	خلف بن احمد
الطابع لله	

Reverse Margin. Illegible.

Obv. Marg. سنة خمس وسبعين وثلثمائة

There is a second coin in Colonel Rawlinson's parcel in the British Museum of an earlier date, and of seemingly similar fabric, though of varying legends, which may tend to throw light upon the due attribution of the preceding piece (No. B.) The superscriptions are reproduced below.

No. C.

Size 14. Weight 8·5. A. H. 331.

Rev.	Obv.
لله	لا اله الا
المتقي	الله محمد
بالله	رسول الله
خلف	

Obv. Marg. بسم الله ضرب هذا سنة احدى وثلثين وثلثمائة



Reverse Margin. et cetera. محمد رسول الله

¹ This coin has likewise been engraved for the illustration of Mr. Vaux's paper in the Num. Chron. xx. p. 56.

MAHMÚD.

No. 4.—(To precede XII. Old Series, Journal, vol. ix. p. 309).

Gold. Weight 68½ gr. Nishápúr. A.H. 399.—*British Museum.*

REV.	OBV.
 محمد رسول الله القادر بالله ولي عهده الغالب بالله يمينى	 لا اله الا الله وحده لا شريك له يمين الدولة و امين الملة ابو القا سم
Obverse Margin. Int.	بسم الله ضرب هذا الدينار بنيسابور في سنة تسع وتسعين وثلثمائة
„	Ext. Surah xxx. 4, 5.
Reverse Margin.	Surah ix. 33, and lxi. 9.

No. 5.—(To follow XII., Old Series, Journal, vol. ix. p. 309.)

Gold. Weight gr. Nishápúr. A.H. 403.—*General Miles.*

REV.	OBV.
محمد رسول الله القادر بالله ولي عهده الغالب بالله يمين الدولة	لا اله الا الله وحده لا شريك له ابو القاسم
Obverse Margin.	بنيسابور سنة ثلث و اربعماية
Reverse Margin.	Surah ix. 33, and lxi. 9.

No. 6.—(To follow XVII., Old Series, p. 311.)

Gold. Weight 52 gr. Herât. A.H. 413. New Type.—*Colonel Stacy.*

REV.	OBV.
لله	عدل
محمد رسول الله	لا اله الا
يمين الدولة	الله وحده
وامين الملة	لا شريك له
نظام الدين	القادر بالله
ابو القسم	

Obv. Marg. Int. بسم الله ضرب هذا... بهرة سنة ثلث عشرة واربعمائة

„ Ext. Surah xxx. 4, 5.

Reverse Margin. Surah ix. 33, and lxi. 9.

No. 7.—(To follow XVIII., Old Series, p. 311.)

Gold. Weight 62 gr. Ghazni. A.H. 415. Unique.—*Colonel Stacy.*

REV.	OBV.
لله	لا اله الا
محمد	الله وحده
رسول الله	لا شريك له
يمين الدولة	القادر بالله
وامين الملة	
ابو القسم	

Obv. Marg. Int.—

بسم الله ضرب هذا الدينار بغزنة سنة خمس عشرة واربعمائة

„ Ext. Surah, xxx. 4, 5.

Reverse Margin. Surah, ix. 33, and lxi. 9.

No. 7 a.

Mr. B. Elliot possesses a somewhat similar coin of the Ghazni mintage, dated—

• • اربع عشرة واربعمائة, i.e. 414 A.H.

No. 7 b.

Gold. Weight 60·5 gr. Ghazni. A.H. 418.—*British Museum (Rawlinson Collection)*

Coin varying from No. 7, only in the change of date, and the substitution of the name of **مكحول** for the **أبو القاسم** on the reverse.

No. 8.—(To precede No. XIX., Old Series, p. 311.)

Gold. Weight 70 gr. Nishápúr. A. H. 405.—*British Museum.*

Similar legends to No. XIX., Old Series; varying only in the omission of the **عدل**, and the insertion of the title **وأمين الملة** on the sides of the obverse field.

No. 9.—(To follow No. XX., Old Series, Journal ix., p. 312.)

Aur. cus. in *Nisabur* a 421. A. i. a sin. et dext., Ar. **القادر بالله**

Margin. Int.—

بسم الله ضرب هذا الدينار بنيسابور سنة احدى وعشرين واربعمائة

A. ii. **مكحول رسول الله**

عليه السلام

مكحول

Frähn, Bulletin de la Classe Historico-Philologique de St. Petersburg, tome iv. (1846) p. 45; and Opusc. Postum., edidit B. Dorn, p. 251.

No. 10.—(No. XXVII., Old Series, p. 315.)

Silver. Weight 44 gr. Ghazni. A. H. 395.—*Colonel Stacy.*

Rev.

٥ ٠ ٥

مكحول رسول الله

القادر بالله

يمين الدولة

مكحول

Obv.

يميني

لا اله الا

الله وحده

لا شريك له

ص د

Obv. Marg. **بسم الله ضرب هذا الدرهم بغرنة سنة خمس وتسعين وثلاثمائة**

Reverse Margin. Surah, xxx. 4, 5.

As introductory to the later acquisitions of the same type of coin, I reinsert the original woodcut of the previously sole available example of the bilingual coinage of Mahmúd, which has already appeared at p. 323, vol. ix., Journal R.A.S.

Since the date of the publication in question, European collectors have succeeded in rescuing from the local crucibles no less than three additional specimens of this mintage, which determine conclusively that the issue constituted an ordinary serial coinage of a given locality, as opposed to the alternative supposition, suggested by the solitary piece heretofore known, of an occasional or commemorative purpose being indicated in their exceptional type. A second annual date is furnished by the new accessions, but the more interesting information in regard to the site of their fabrication still remains indeterminate, though the denomination of the mint city may be conjecturally suggested from the partially legible letters preserved in the Kufic on two coins, and the full designation of Mahmúd, so obvious in the Sanskrit marginal records—as a locality honoured, on its conquest, by some titular identification with his own name.

Having completed the mechanical decipherment of the several letters of the central legend nearly as they are now reproduced under the description of Coin No. 11, I submitted the result, together with my original collocated facsimile transcripts of the superscriptions of the several pieces, to the scrutiny of Professor Wilson, and having carefully tested the value of each individual character by the demands of Palæographic consistency and the requisitions of linguistic sense¹, I adopt, without hesitation, the following matured version of our highest Sanscrit authority :

अव्यक्तमेक मुहम्मद अवत(त)र नृपति महमूद

Abyaktam eka Muhammad avat(á)ra Nripati Mahmúd.
The invisible one, Muhammad incarnation, King Mahmúd.

¹ Professor Wilson was at first inclined to suggest a transcription of श्री प्रभुरेक *Sri prabhureka* for the opening phrase, but upon examining more closely the formation of the original letters and comparing them with repetitions or variations on other portions of the coins, he decided upon the reading given above, representing अव्यक्तमेकम् *Avyaktamekam*, "the indiscrete, the invisible one"—specially used to signify the first cause or supreme universal spirit.

No. 11.—(No. XLII, Old Series, Journal ix. p. 323.)

Silver. Size 4½. Weight 45·4 gr. A.H. 412.—*British Museum.*

Rev.

Obv. (Revised Reading)

بالله
لا اله الا الله
محمّد رسول الله
يمين الدوله
وامين الملة
محمود

अ व्यक्तमेक
मुहम्मद अ
वतर नृत
ति महमूद



Obv. Marg. अय टक महमूद सवत ४१२

This Taka (of) Mahmūd ————— Samvat. 412

Reverse Margin. باسم الله ضربت واربعمائة

No. 12.

Silver. Size 4. Weight 36·5 gr. A.H. 412.—*Colonel T. Bush. Plate, fig. 2.*

Areas as in No. 11.

Obv. Marg. अय टक म कीयर सवत ४१२

Reverse Margin. بالله ضرب هذا الدرهم مكم * * * *

No. 13.

Silver. Size 4½. Weight 41 gr. A.H. 419.—*British Museum, Plate, fig. 3.*

Obverse Area as in No. 11.

Margin. अयं ट कीयर संवती ४१९

Reverse Area as above, No. 11, with the exception that the الفادر is placed at the top, and the بالله on the left side of the field.

Margin. باسم الله ضرب هذا الد * * * تسع عشرة واربعمائة

No. 14.

Silver. Size 4½. Weight 46 gr. A.H. 419.—*My Cabinet*. Plate, fig. 4.

Obverse Area as in No. 11.

Margin. अयं टक महमूद कथर संवती ४१९

Reverse Area as in No. 13.

Margin. بسم الله ضرب هذا الدرهم [بمحمود سر] سنة تسع
عشرة وأربعماية

No. 15.—(To precede XLIII., Old Series, p. 324.)

Silver. Weight 46 gr.—*Colonel T. Bush*.

REV.

” لله ”

محمد رسول الله
 صلى الله عليه وسلم
 القادر بالله
 يمين الدولة
 دامين محمود

Margin illegible.

OBY.

عدل

لا اله الا
 الله وحده
 لا شريك له
 يميني

Margin apparently unengraved.

No. 15 a.

Colonel Stacy's collection—now in the possession of the Asiatic Society of Bengal—contains a coin with legends similar to the above, varying only in the insertion of the الله امين in the ordinary alignment, above the name of محمود

¹ See geographical summary at the end of this section of the paper.

No. 16 (Variety of No. LIV, Old Series, Journal ix. p. 333.)

Copper. Ghazni, A.H. 405.

Similar, in the typical arrangement of the intricately interlaced legends, to No. LIV., Old Series; but presenting the novelty of the use of the word كورة (city) as a prefix to the name of the place of mintage. This is the only instance, within my knowledge, of the use of a similar specification in the Ghaznavi series; the synonymous word بلد will be seen to have been occasionally employed by the succeeding monarchs of the Ghori race.

Having concluded the description of the coins of Mahmūd, it may be appropriate to complete the archæological records of his rule by a notice of the extant monumental inscriptions preserved in his ancient capital. These consist, 1st, of the writing that adorns and explains the object of the erection of the Minār, which stands to this day near his burial place¹; 2nd, of the Kufic and Neskhi scrolls on his marble tombstone; and, 3rd, of the brief inscription on the Deodwār, or Himālayan pine-wood portals of his sepulchre², which tradition has associated, on very insufficient grounds, with the gates of Somnāth³. I do not consider that there is any reason to doubt the antiquity of these monuments, or the authenticity of the records they bear, though it is a matter of regret that the minaret should have suffered so much from time, exposure, and possibly violence, as to leave its commemorative legend difficult to decipher or restore.

¹ An engraving and description of the fellow minār will be found at the end of the coins of Mas'ūd.

² This quasi shrine seems to have been respected from the very first; and even the all-destroying A'la-ud-din Jehānsōz withheld his hand from the tomb of Mahmūd.

³ These gates are now preserved in the fort of Agra. Elaborate drawings of them have been published in the Jour. As. Soc. Bengal, vol. xii. (1843), and reduced facsimile models are to be seen in the Crystal Palace at Sydenham.

Inscription No. 1.

Copy in the Suls character of the Kufic Inscription on the Minaret nearest the village of Rozah¹:—

بسم الله الرحمن الرحيم السلطان الاكرم ملك الاسلام
يمين الدولة و امين الملة ابو المظفر ظهير المسلمين ومعين
المساكين ابي القاسم محمود انا لله برهانه بن سبكتكين
غازي الغازي امير المومنين امر بنا هذا العامة العالة العلية
قد تمت باليمن والبركة

Translation.

"In the name of God the Most Merciful. The High and Mighty Sultán, Malik of Islám, the Right Arm of State, Trustee of the Faith, the Victory Crowned, the Patron of Moslems, the Aid of the Destitute, the Munificence Endowed, Mahmúd (may God glorify his testimony), son of Subuktagín, the Champion of Champions, the Amír of Moslems,—ordered the construction of this lofty of loftiest of monuments, and of a certainty it has been happily and prosperously completed."

Inscription No. 2.

Kufic Scroll on the Sarcophagus of Mahmúd, at Ghazní:—

غفران من الله للامير الاجل السيد نظام الدين ابو القاسم
محمود بن سبكتكين غفرالله له

Translation.

"May there be forgiveness from God upon the great Amír, the Lord, Nizám

¹ The above is extracted verbatim from the Jour. As. Soc. Bengal (1848), vol. xii. p. 77. The imperfect state of the monument from whence this inscription has been copied, must necessarily detract from the conclusiveness of portions of the transcription; however, in the absence of authentic facsimiles, it is given on the faith of the officials employed by General Nott, for it is not definitively stated, nor can I otherwise discover, under whose direct supervision the professed reproduction and too obvious restitutions were made.

ud dīn Abūl Kāsim Mahmūd, son of Subuktagīn. May God have mercy upon him!."

MEM.—"On the reverse of the Sarcophagus, there is an inscription in the Neskh character, recording the date of the decease of Sultān Mahmūd, as Thursday, the 7th², remaining day (*i.e.*, the 22nd or 23rd) of the month of Rabi al Akhir, A.H. 421." (H. C. Rawlinson.) Jour. As. Soc. Bengal, xii. 76.

Inscription No. 3.

Inscription in Kufic on the upper portion of the framing of the so-called "Gates of Somnāth," once forming the portals of the Tomb of Mahmūd, at Ghaznī:—

بسم الله الرحمن الرحيم غفران من الله للامير الاجل السيد
الملك المويد يمين الدولة و امين الملة ابو القاسم محمود بن
سبكتكين رحمة الله عليه ولو رحمة له

Translation.

"In the name of the most merciful God—(may there be) forgiveness from God for the Amīr, the most Illustrious, the Lord, the Victorious King, Right Hand of the State, and Custodian of the Faith, Abūl Kāsim Mahmūd, son of Subuktagīn, may the mercy of God be upon him" [remaining phrase illegible].

¹ I have reproduced the Arabic text given above from the Kufic facsimile of Lieut. Studdart. The more minute Kufic legend on the band below the main inscription is too imperfectly rendered in that officer's lithograph to be susceptible of decipherment. It appears, however, to commence with the usual

بسم الله الرحمن الرحيم

² It will be seen that a counterpart definition of the date of Mahmūd's decease is given by Baihaki.—Jour. Royal Asiatic Society, ix. 331.

MUHAMMAD BIN MAHMUD.

THE three novel accessions to the heretofore unique specimen of the coinage of Muhammad bin Mahmúd, apart from their claims on the ground of numismatic rarity, deserve attention for the several items of historic interest which they exemplify by the tenor of their legends.

The first in order, No. 17, will be seen to be dated in A.H. 414, and presents the peculiarity of an apparent fabrication from one of Mahmúd's own reverse dies, associated with an obverse engraved to bear testimony to Muhammad's local kingship, and to display the mint-impress of Júzján, the Government specially assigned to him by his father shortly after A.H. 406¹. Mr. Masson's collection had previously contributed a somewhat parallel piece, in the joint names of Mahmúd and his son Masaúd, the illustrative value however of which was considerably diminished by the obliteration of both date and place of mintage². The present exemplar, supported as it is by No. 18, definitively shows that these young princes, in addition to the other insignia of royalty somewhat guardedly apportioned to them, were both permitted to exercise, under due restrictions, the privilege so highly prized among Oriental nations, of coining money³.

¹ This nomination is deposed to in his brother Masaúds own words:—

و ولایت هرات بما داد و ولایت کوزکانان ببرادر ما MS. *Tárikh-i-Masaúdí*.

I observe that Muhammad was at his seat of government at the moment of his father's death. One copy of the Masaúdí inserts the following passage to this purport, after the word رفتند in the extract already given from a less perfect MS., at p. 331, vol. ix. line 4, note 1:—

* * * بکوزکانان تا امیر محمد بزودی بیاید و بر تخت ملک نشیند *

² See Journal, vol. ix p. 312.

³ The jealousy existing between these twin brothers, as well as the subject of Oriental pompe and ceremonies, is amusingly illustrated in the following speech of Masaúd:—

و برادر خلیفه ما باشد چنانکه نخست بر منابر نام ما برند شهرها
و خطبه بنام ما کنند آنگاه نام وی و بر سکه درم و دینار و طرا:

جامه نخست نام ما نویسند آنگاه نام وی T. Masaúdí.

The second specimen, in seeming order of time, for the date is not fully preserved¹, in like manner bears the conjoint designations of father and son ; but in this instance, the former's titles of honour are altogether omitted, as was the case in many of his own later currencies of northern fabric², and otherwise the coin has the appearance of the consistent design attending a serial currency, as contrasted with the hasty combination to be detected in the earlier piece. The name of the place of mintage is, in this case, singularly well defined, reading obviously **وَالِين** Wáwálin, a city regarding which I have elsewhere entered into minute enquiries³, but whose exact position it is difficult to fix, owing to intermediate changes of urban sites and attendant modifications of nomenclature ; it will be enough to indicate that it was situated between Khulum and Tálíkán, somewhere near the modern Kundúz.

No. 19, in its own degree, illustrates another section of the annals of its day, in the insertion of the name of Ahmad, under the usual Arab form of surname⁴, where the father's designation is derived back from the son. Here Muhammad is found calling himself **أبو أحمد** "the father of Ahmad⁵," the son under whose guidance he had eventually, in the days of his blindness, to rule the kingdom once again restored to him on the deposition of his brother Masaúd.

¹ There are traces only of the commencement of the unit number (**أحد**) I adopt 421 A.H. as the more probable date, in preference to 411 A.H.

² Nos. 50, 53, Old Series, and No. 21. New Series, p. 156.

³ See Journal, ix. p. 316; also geographical notes immediately following the Table of dates, *infra*.

⁴ **كنية** "a patronymic, or a filionymic."

⁵ The legible legends on coin No. 19 now enable me to explain the imperfectly formed monogrammatic heading on the reverse of Coin LVII., which proves to be the identical designation of **أبو أحمد**

No. 17—(To precede No. LVII., Old Series, Journal, ix. 334).

Silver. Weight 36.0 gr. Jázján, A.H. [4]14. Unique.—*Colonel T. Bush.*
Plate, No. 6.

Rev.	Obv.
<p>لله</p> <p>ماحمد رسول الله</p> <p>صلي الله عليه وسلم</p> <p>القادر بالله يمين الدولة</p> <p>وامين الملة نظام الدين</p> <p>ابو القسم</p>	<p>عدل</p> <p>لا اله الا</p> <p>* الله وحده *</p> <p>لا شريك له</p> <p>ماحمد بن محمود</p>

Obverse Margin. * * هم بنجوزجان سنة اربع وعش

Reverse Margin. Surah, xxx. 4, 5.

See coin of similar character, with the joint names of Mahmúd and Máasúid,
No. xxi. p. 312, Jour. R. A. S., Vol. ix.

No. 18.

Silver. Weight 50 gr. Wáwálin.¹ Unique.—*Colonel Bush.* Plate, fig. 7.

Rev.	Obv.
<p>لله</p> <p>ماحمد</p> <p>رسول الله</p> <p>عليه السلام</p> <p>ماحمد</p>	<p>عدل</p> <p>لا اله الا الله</p> <p>وحده لا شريك</p> <p>له القادر بالله</p> <p>ماحمد بن</p>

Obverse Margin. . . . بهذا الدرهم بواوالين سنة اح — —

Reverse Margin. — — و يومئذ يفرح المؤمنون بن — Surah xxx. 4, 5.

¹ See note on this mint city, Jour. R. A. S. ix. pp. 316 and 339; and also the geographical recapitulation at the end of this article.

No. 19—(To follow No. LVII., Old Series, Journal, ix, 334).

Silver. Weight 60 gr. Unique. Mr. Frere.—*British Museum*. Plate, Fig. 7.

REV.

ماحمد
رسول الله جلال
الدولة وجمال
الملة ابو احمد
ماحمد بن ماحمد

OBV.

لا اله الا
الله وحده
لا شريك له
القادر بالله

Margin. Surah, xxx. 4, 5.

Margin illegible.

No. 19 a.

Bilingual coin of this Sultân, of the Bull and Horseman type—described and illustrated under No. 26, at page 170 *infra*.

MASAÚD.

No. 20—(To follow No. LVIII.)

Gold. Weight gr.—*Mr. Bardoe Elliot, late Bengal Civil Service.*

Rev.	Obv.
الله	القايم
محمّد رسول الله	لا اله الا الله
ناصر دين الله	وحده لا شريك له
حافظ عباد الله	القادر بالله
ظهير خليفه الله	ولي عهده
مسعود	

Obverse Margins. Int. illegible. Ext. usual formula.

Reverse Margin as usual. Surah, ix. 33; and lxi. 9.

No. 21.

Gold. Weight 57 gr. Ghazni. A. H. 423. Unique.—*Colonel Stacy.*

Rev.	Obv.
الله	لا اله الا
محمّد رسول الله	الله وحده
صلي الله عليه	لا شريك له
الناصر لدين الله	القايم بامر الله
مسعود	

Obverse Margin. Int.—

بسم الله ضرب هذا الدينار بغزنة سنة ثلث و عشرين واربعماية

„ „ Ext. xxx. 4, 5.

Reverse Margin. Surah, ix. 33, and lxi. 9.

No. 22.

Gold. Weight 54 gr. Ghazni. A.H. 423. Unique.—*Colonel Stacy.*

REV.
 لله
 محمد
 رسول الله
 عليه السلام
 مسعود

OBY.

Same as in No. 21.

Margin. Surah, ix. 33, and lxi. 9.

Margins as in No. 21.

No. 23.

Gold. Weight 69 gr. Ghazni. A.H. 428.—*Colonel Stacy.*

REV.
 لله
 محمد رسول الله
 القائم بأمر الله
 ناصر دين الله
 أبو سعيد

OBY.
 عدل
 لا اله الا الله
 وحده لا شريك له
 مسعود بن محمود

Obverse Margin. بسم الله الرحمن الرحيم ضرب هذا الدينار بغزنه سنة
 ثمان وعشرين وأربعماية

Reverse Margin. Surah, ix. 33, and lxi. 9.

No. 23 a.

Mr. Bardees Elliot has a coin of this type, dated Ghazni, A.H. 427.

There is a marked modification in the forms of the letters constituting the legends of these coins as contrasted with the style of character in ordinary use. The change from the stiff and formal outlines of the Kufic in No. 22, to the more flowing Persian writing in No. 23, is most striking, and possibly illustrates either Masaúd's own Persian predilections, or mayhap the decline of the supremacy of the Arabic tongue, somewhat irregularly used as the Court language. We learn, indeed, from Baihaki, that in A.H. 422-3, Masaúd's ministers had some difficulty in corresponding, and still more difficulty in verbal communication, with the Court of Baghdád.¹

No. 24—(No. lxi., Old Series, Journal, p. 338).

Silver. Broken Coin. Balkh, A.H. (4)22.—*Colonel Stacy.*

No. 25—(Variety of No. LXVII., Old Series, Journal, p. 340).

Silver. Weight 53 gr.—*Colonel T. Bush.*

Obverse and Reverse trilinear legends as in the original type, No. 67, Old Series. The word لله replaces the ظهيرله at the top of the reverse field, and the full name of مسعود is contracted into its initial م.

No. 26—(To follow No. LXXIV., Old Series, Journal, p. 342).

In classifying Mr. Masson's ample collection of the coins of the kings of Ghazni, I was necessarily struck with the entire absence of any money of the period purporting to have been minted at the ancient city of Kábul. This, however, seemed to be so far explained by the data afforded by the coins themselves, as to lead me to infer that Ferwán, in the first instance, and Ghazni, at a more advanced stage of the Mohammedan domination, supplied in turn the monetary wants

¹ See also remarks upon the same subject apropos to Coin No. XCVIII., Old Series, ix. p. 353; and note, p. 173, *infra*; also Elliot, *Historians of India*, 117; and *Kitáb i Yamíni* (Reynolds), p. 405.

of the adjacent country.¹ In addition to this, it appeared, during the course of the enquiry regarding the precise locality of the seat of government of the Hindú—or, as the early Moslem writers have designated it, the Brahman—dynasty, that the sovereigns of this race had ceased to reside at the old capital so early as the commencement of the fourth century, A.H.² Whether they subsequently returned for a brief space, or merely visited the revered site for the requisite purposes of inauguration (which the canon declared could not rightly be effected elsewhere³) we need not now pause to decide. It will be sufficient to conclude that in their migrations eastward, they carried with them the conventional dies of the kingdom, and continued to coin money after the same stamp, if not even in the name of the most prominent monarch of their race⁴, until the growing power of the Mohammedans drove them towards the Sutlege, and even the Láhór coinage yielded to Kufic influences⁵; while the original Bull and Horseman device, with its legends in the local character, took refuge, though but for a brief season, in Delhí and Ajmír.

The novelties I am about to describe, however, form the earliest specimens extant of the adaptation by the Mohammedans of the local money of the Hindús, in the full acceptance of the prevailing idolatrous symbols,—a concession they were seemingly unwilling to make in the first instance, when they adopted only the weights and standard of the currency of Kábul, in the issues from the Ferwán mint⁶. The new pieces will be seen to have been produced from designs but little changed from the earlier style of the money of the Brahman kings, and retain the dynastic⁷ title of श्री समन्त देव, “Sri Samanta

¹ Jour., ix. p. 282.

² Jour., p. 286.

³ Jour., ix. p. 284, foot note.

⁴ Coins of the Kings of Kábul, Jour. R.A.S., ix. 177.

⁵ Journal, ix. 349.

⁶ Journal, ix. p. 303. Coins 2, &c. See also general remarks on the subject, p. 288, *ibid*.

⁷ As I have lately had occasion to review the dynastic bearing of this name in connection with the employment of another title on one of the numerous offshoots from the standard type of coin, I may as well extract my observations on the subject:—

“I do not know that there are any more exclusively Hindú novelties in this section of numismatics that I can usefully refer to; but, before I leave the subject, I may be permitted to make some observations in reference to an original suggestion of my own, that the श्री हमीर: on the reverse of the immediately succeeding Moslem coins, was designed to convey the title of the spiritual representative of the Arabian Prophet on earth, embodied for the time being in the Khalif of Baghdád. Sir H. M. Elliot, placing himself under the guidance of Captain Cunningham, has contested this inference. (Elliot's Muhammadan Historians of India, 182.) I am not only prepared to concede the fact that Muhammad-bin-Sám uses this term in connection with his own name on the lower Kanauj coins, but I can supply

Deva" on the obverse, over the figure of the recumbent bull; while on the reverse, in front of the horseman, are introduced, in Kufic letters, the names severally of Muhammad and Masa'úd. I have reserved the more extended notice of the sole exemplar of this mintage pertaining to the former sultan, which is in bad preservation, till I could illustrate it by the more perfect specimen bearing the name of his brother and successor, a wood-cut of the reverse of which I now insert. Both these coins are in the possession of Mr. E. C. Bayley, Bengal Civil Service. The cut as it now appears was engraved for Mr. Austin's edition of Prinsep's Essays¹, and has been obligingly placed at my disposal for use on the present occasion.



Having exhausted the newly discovered coins of Masa'úd, I follow

further independent evidence, that my opponents could not then cite against me, in the association of this title with the names of the early Sultáns of Dihli in the Pálam Inscription (A. 1333, Vikramáditya); but on the other hand, I can claim a still more definitive support in an item of testimony contributed by the consecutive suite of the selfsame fabric of coins, where the **हमीरः** is replaced by the word **खलीफ**—Khalífa. As far as I have yet been able to ascertain, this transition *first* takes place on the money of 'Alá-ud-dín Masa'úd (639-644 A.H.): and here again I can afford, in all frankness, to cite further data that may eventually bear against myself, in recording that this reverse of **श्री खलीफ** is combined in

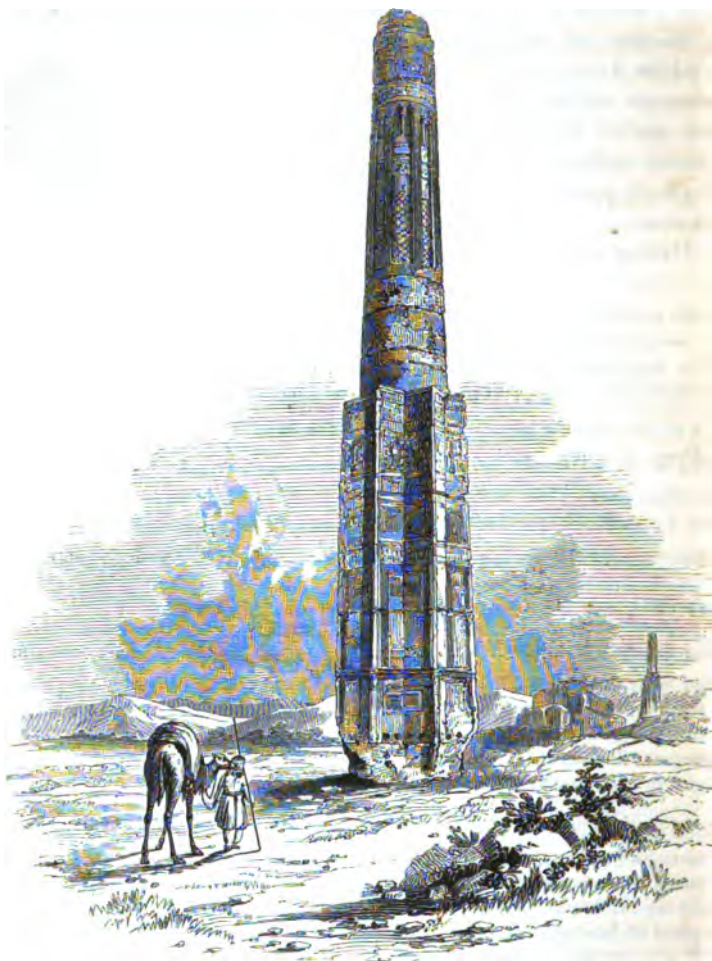
other cases with a broken obverse legend of **अमीरलिम** which,

being interpreted to stand for the **أمير المؤمنين** of the Arabic system, may either be accepted as the Sanscrit counterpart legend of Altamah's anonymous coins in the Persian character, or be converted into a possible argument against my theory, if supposed to represent the independent spiritual supremacy claimed by subsequent Sultáns of Dihli; which last assignment, however, will scarcely carry weight in the present state of our knowledge. As regards the difficulty raised respecting the conventional acceptance of the **श्री समन्त देव** of the coins as

an historical, rather than an individually titular, impress, I have always been fully prepared to recognise the linguistic value of the word *Samanta*, and yet claim to retain the *Sri Samanta-deva*—which comes down to us, in numismatic sequence, in the place of honour on so many mint issues—as an independent name or title, to which some special prestige attached, rather than to look upon it as an ordinary prefix to the designation of each potentate upon whose money it appears. And such a decision, in parallel apposition to the succession of the titles of *Sri Hamira* and *Khalifa* just noticed, would seem to be strikingly confirmed by the replacement of this same legend of *Sri Samanta-deva*, on the local coins of *Cháhad-deva*, by the style and title of the Moslem suzerain to whom that *rāja* had eventually to concede allegiance."—Prinsep's Essays. John Murray, London, 1858, i. 332.

¹ Eventually published under the auspices of Mr. Murray.

the arrangement adopted in the case of Mahmúd, and append, in further illustration of the reign of the former, the incomplete inscription from the solitary metropolitan monument associated with his name, that appears to have escaped the exterminating vengeance of A'lá ud dín Jehánsóz¹.



The Minarets at Ghazni, from a Sketch by G. J. Vigne, Esq.

Fergusson's Handbook of Architecture, p. 415, vol. i.

On this occasion—thanks to Mr. Fergusson's liberality—I am enabled to introduce an exact sketch of the picturesque minaret upon

¹ See *infra*, under the Ghorí dynasty.

whose surface the Kufic legend is raised—an engraving, it may be added, which is further valuable, as being the only satisfactory representation we have of any of the buildings in or around the ancient capital of the family of Subuktagin.

Mr. Fergusson gives the following note on these buildings:—"Two minarets still adorn the plain outside the city, and form, if not the most striking, at least the most prominent of the ruins of that city. Neither of them were ever attached to any mosques; they are, indeed, pillars of victory, or *Jaya Sthambas*, like those in India. * * * The lower part of these towers is of a star-like form, the plan being apparently that of two squares placed diagonally the one over the other; the upper part, rising to the height of about 140 feet from the ground, is circular. both are of brickwork, crowned with ornaments of terra-cotta of extreme elaboration and beauty, and retaining its sharpness to the present day."—*Handbook*, i. 414.

Inscription No. 4.

"Copy in the Suls character of the Kufic Inscription on the Minaret nearest the town of Ghazni."

بسم الله الرحمن الرحيم
 امر السلطان الاعظم ملك الاسلام اعلام المملكة و الدولة ابو
 سعيد مسعود بن ظهير الدولة الماحمود ابو ابراهيم نصير الدين
 امير المومنين يمين المملكة امين الملة مالك رقاب الامم
 سلطان المكرم الخاقان مولى ملوك العرب و العجم خلد
 الله تعالى ملكه و سلطانه و افاض علي العلمين برة واحسانه
 غفر الله لاولادي ولجميع المسلمين

Translation.

"In the name of God, the most merciful, (erected) by order of the Mighty Sultán, the Malik of Islám, the Standard of Dominion and Wealth, the August Masáúd, Son of the Supporter of the State, Mahmúd, Father of Ibráhím, Defender of the Faith, Amír of Moslems, the Right Arm of Dominion, the Trustee of the Faith, the Master of the Necks of Nations, the Noble and Imperial Sultán, Lord of the Countries of Arabia and Persia. May the Great God perpetuate his throne and kingdom; commemorated be his beneficence. May God forgive the sins of himself, his parents, and of all Moslems."—*J.A.S.B.*, xxii. 77, 78.

As next in authenticity to the more enduring record of titles on coins, and as corrective to a certain extent of the imperfectly decipherable inscription on his sole architectural monument, I copy from the official documents preserved in the text of Al Baihaki the following heading of the original Arabic عهد وفا, agreed to by Masaúd in A.H. 423¹, which gives a full detail of his recognised titles at that period, as well as a brief recapitulation of those of his deceased father:—

Commencement of the عهد وفا

بسم الله الرحمن الرحيم من عبدالله ابن عبدالله ابى جعفر
الاسلم القايم بامر الله امير المومنين الى ناصر دين الله الحافظ
لعباد الله المنتقم من اعداء الله ظهير خليفه الله ابى سعد مولى
امير المومنين بن نظام الدين وكهف الاسلام والمسلمين يمين
الدولة وامين الملة ابى القاسم ولي امير المومنين

In the less formal portions of his narrative, Al Baihiki entitles his sovereign حافظ بلاد الله ابو سعيد &c.

Albirúni, also a contemporary writer², in his preface to his Kánim, which bears the very name of "Masaúdí," enumerates his patron's titles as follows:—

الملك الاجل السيد المعظم ظهير خليفه الله و ناصر دين الله
و حافظ عباد الله المنتقم من اعداء الله ابى سعيد مسعود

—Unpublished MS. (engrossed at Baghdád, in A.H. 570) in the collection of the late Sir H. M. Elliot, p. 1.

¹ A number of incidents curiously illustrative of the manners and customs of the day and the state of civilization of the Ghaznavi court, at this time held at Balkh, are developed in the course of the narration of this bit of diplomacy. The difficulties incident to the absolute necessity of the use of a foreign and very imperfectly known language on this occasion are vividly brought to light. And while detailing the official ceremonies attendant on the public recitation of the counter-part treaties in the two languages, and the signature of the several documents by Masaúd himself, our author takes the opportunity of enlarging on the accomplishments of that prince as a Persian scholar, in contrast to the general amount of book-learning, which was clearly limited, as one of the chief officers whose counter-signature was required, was obliged to have that duty performed for him by another!

² Abú Rihán Muhammad bin Ahmad al Birúni al Khawárizmí was born about A.H. 360, and died in A.H. 430.—Elliot, *Historians of India*, p. 96.

In my first article on the Coins of the Kings of Ghazni, I extracted from the Arabic text of Abûl Fidâ, a list of Masaûd's territorial possessions (*Jour.*, ix. p. 342). For the purposes of immediate comparison, I may, perhaps, fitly claim the limited amount of space needed for the introduction of the Latin translation of the original by Reisk, which has not previously been given. The Oriental author, in summarizing the events of the year A.H. 432, concludes his notice of Masaûd's rule to the effect :—

"Erat enim Masud vir excellentium virtutum, egregie beneficis in egenos ; . . . maximus etiam eruditorum patronus, qui ad ipsum undecunque confluebant, eique suos libros inscribebant. Ipse litteras pingebat elegantanter, et late regnaverat multaque cum gloria, Isfahanæ dominus, et Raim, Tabarestanæ, Gorganæ, ceteraque Chorasanae, Chovarezmia, Arransa¹, Mocrana, Kermanæ, Segestanae, Sendis, Rocchagi, Ghaznae, Gori, terra marique imperator."—(Abûl Fidâ, iii. 113.)

¹ M. Defrémery proposes to correct the original text of بلاد الران into بلاد الداور, the Zamîn dâwar, on the Helmund, of the present day. As the MS. of Ibn Athîr and Ibn Khaldûn, cited in support of this rectification, seem to be conclusive on the point, otherwise sufficiently reasonable in itself, I readily concur in the substitution.

M. Defrémery, in the same article (a critique on my previous paper on the Kings of Ghazni, in the Paris "*Revue Numismatique*" for 1849, p. 230.), while adding much valuable information from independent sources, takes further occasion to amend certain readings and omissions of mine. I may as well, therefore, advert to them all seriatim in this place.

The first objection taken (at p. 236.), is to my retention of the negative prefix in the word نَباشد, in the passage extracted from the Târikh Guzîdah, under note 1, p. 272, *Journal*, vol. ix. M. Defrémery has so much of justification for this somewhat gratuitous emendation, that one copy of the work in question, in the E.I.H. library (No. 160), does omit this initial *nun*, and it is possible that the Paris M.S. he had occasion to consult was equally deficient in the single dot, which constitutes so often an important element in Persian writing! I was fully aware at the time I made my quotation, of the variation between the two MSS., and I deliberately and intentionally selected an inferior and infinitely worse engrossed MS. (E.I.H., No. 649) as my avowed authority, because that copy made sense of the passage and the other did not. If I could have any doubt remaining on this merely critical issue (for I see M. Defrémery coincides with me in the ultimate interpretation) it would have been completely set at rest by the text of the Ranzat-us-Safâ, which is phrased in a nearly similar manner, and which I alluded to without thinking it necessary, either then or now, to reproduce in confirmation of so obvious a meaning.

The next rectification concerns a more positive error of my own, which I am at a loss to account for, except on the supposition of insufficient reference to the text, whose general purport I was embodying in the current evidence applying to a particular issue. Suffice it to say, that the words "in all nine years," (line 17,

The enumeration must, of course, be held to represent Masaúd's dominions only as they stood at the height of his power. In later years his varying fortunes stript him of many of his richest provinces; but it may be useful to quote, as indicative of the spirit of the time, and the tendency of Oriental assumption, the long list of kingdoms, some of which he had avowedly yet to conquer, claimed by him under an expected patent of the Khalif on the elevation of Alkáim Beamrillah in A.H. 422-3. Baihaki exemplifies these demands in the following terms :—

* برآن شرط که جون ببغداد باز رسد امیرالمومنین منشوری
تازه فرستد خراسان و خوارزم و نیمروز و زابلستان و جمله
هند و سند و جغانیان و ختلان و قبادیان و ترمذ و قصدار
و مکران و دانشتان و کیکاهان و ری و جبال و سباهان
جمله تا عقبه حلوان و کرکان و طبرستان دران باشد * *
* * و دستوری دهد تا از جانب سیستان قصد کرمان
کرده اید و از جانب مکران قصد عمان * * *

p. 279, vol. ix. of this Journal), should be corrected to "according to another statement, nine years."

Finally, M. Defrémery has pointed out (note, p. 242.), with regard to my remark (at p. 281. ix.) on Mirkhond's taking no notice of the vassalage of Bahrám Sháh, under Sanjar—that this statement is only partially correct, as although the author in question does not allude to this feodality in its proper place in the history of the Ghaznavis, he does speak of it under the section of his work devoted to the annals of the Suzerain Seljúks. See *Journal Asiatique*, October, 1848, p. 335.

MODUD.

No. 27—(No. LXXIX., Old Series, Journal, p. 345).

Silver. Weight gr. Ghazni, A.H. 484.

REV.	OBV.
فتوح	عدل
ماحمد رسول الله	لا اله الا
القايم بامر الله	الله وحده
شهاب الدولة	لا شريك له
مولود	

Obverse Margin. * * هم بغزنة سنة اربع و ثلثين

Reverse Margin. Surah, xxx. 4, 5.

No. 27 a.

A nearly similar coin, in the collection of the late Col. Stacy, has the word رائج
 "current," on the right of the obverse field.

A'BD-UL-RASHÍD.

No. 28—(To follow No. XCVI, Old Series, Journal, p. 352).

Silver and Copper. Weight 37 gr. Unique.—*My Cabinet.*

REV.	OBV.
عزالدولة	श्री समन्त देव
وزين الملة	(Sri Samanta Deva.)
عبد الرشيد	Figure of the Bull (Nandi).

IBRAHÍM.

No. 29—(To follow No. CIX., Old Series, Journal, p. 358).

Silver. Weight 48 gr.—*Colonel Stacy.*

REV.	OBV.
<p>○ ○ ○</p> <p>محمد رسول الله</p> <p>ظهیر الدولة</p> <p>الملك</p> <p>ابراهيم</p> <p>ع</p>	<p>لله</p> <p>لا اله الا الله</p> <p>وحده لا شريك له</p> <p>القايم بامر الله</p> <p>نصيرى</p>

Margins illegible.

No. 30—(Variety of No. CXIV., Old Series, p. 360).

Silver. Weight 29 gr.—*Colonel T. Bush.*

Obverse. رمضان محمد رسول الله نصير الدولة ابراهيم

Reverse. Usual type of No. 116, O. S.

No. 31—(Variety of No. CXX., p. 362).

Silver. Weight 35 gr.—*Colonel T. Bush.*

Obverse. قران لا اله الا بالله محمد رسول الله المقتدى بامر الله

ملك الاسلام ع ك

Reverse as in No. 120, O. S.

No. 32—(To follow CXXVII., Old Series, Journal, p. 365).

Silver. Size 1½. Weight 9 gr.—*Masson Collection, E.I.H.*

Obverse. The Kalimah, in three lines.

Reverse. السلطان الاعظم ابراهيم

No. 33.

Silver. Size 1. Weight 5 gr.—*Masson (E.I.H.)*

Obverse as No. 32. (No margin.)

Reverse. ملك ظهير الدولة ابراهيم

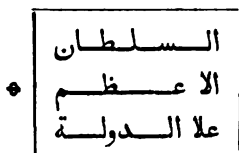
Margin illegible.

MASAUD III.

No. 34—(Variety of No. CXXXIV., Old Series, Journal, p. 367).

Silver and Copper mixed. Weight gr.—*Masson (E.I.H.)*

REV.



مسعود

OBY.

فتح
لا اله الا الله
محمد رسول الله
المستظهر بالله

د

Obverse Margin filled in with triangular points.

Reverse. No margin.

N.B.—The third line in the Reverse legend is only partially legible.

No. 35—(To follow No. CXXXVI., Old Series, Journal, p. 368).

Silver. Size 1½. Weight 5 gr.—*Masson (E.I.H.)*

Obverse. The Kalimah, in three lines.

Reverse. السلطان الاعظم مسعود

No. 36—(To follow No. OXXXIX., Old Series, p. 369).

Copper. Size 3. Weight 40 gr. Unique.—*Col. T. Bush.* Plate, fig. 8.

Obverse. Central Area. The Seal of Solomon within a circle.

Margin illegible.

Reverse. Central Area as in obverse, slightly altered.

Margin. السلطان الاعظم ابوسعد مسعود

No. 37.

Copper. Size 4½. Weight 48 gr.—*Col. T. Bush.*

Rev. Square Area.

علا الدولة

ابو سعد

مسعود

Obv. Square Area.

السلطان

الاعظم

ملك الاسلام

Obverse Margin. الامام المستظهر بالله * * *

Reverse Margin. * * لا اله الا * *

There is a story told in that voluminous collection of Oriental tales, the *Jāmi'ul-Hikāyāt*, which contributes an apposite historiette on the currencies of the Ghaznavis, and furnishes a traditionary comment on the depreciation of the monetary standard, so obviously borne out by the extant specimens of the coinage of the monarch under whom the evil is reported to have reached its climax. I am not able to trace the depreciation in equal progression from the mintages of Mahmūd to those of A'lā-ud-dowlah Mas'ūd, nor indeed would the circumstances deposed to necessitate the idea of any such regular and uniform action; but I can testify generally to the extreme debasement of the issues of this last-named prince, and less sweepingly condemn occasional examples of the mintages of his predecessors. I have not thought it necessary to give the Persian text of the anecdote in question; it may be sufficient to say, that the following free translation embodies all the real purport of the original, which varies considerably in the different MSS., and is more or less defective in all the copies¹ I have had an opportunity of consulting.

¹ 1st, A copy of Sir H. M. Elliot's, from which I have given the Persian text in the *Jour. As. Soc. Bengal*, xxi. p. 121.; 2nd, a MS. in my own possession,

Translation.

"It is related that when Yamín-ud-dowlah occupied the throne and the vigour of his Government extended over many countries, and the rigour of his administration reached idolaters and their temples; the cunning men of Hind exercised their ingenuity, and devised a scheme (of deception). First, they put forth a dirham of just standard and full (intrinsic) value; when, after some time, this coinage¹ obtained free circulation, merchants came from Muhammadan countries and bought it up, and carried it into Khorásán². When the schemers saw that the currency was firmly established and readily received by all—then, by degrees, they debased the standard; the merchants (still) continued to trade in the silver, without being aware of the (existence or) extent of the depreciation. From all parts they brought gold and silver to Hindustán, and, in return, obtained³ copper and brass; and in this way a large amount of the wealth of the Mubammadans was drawn to Hindustán. When the evil extended beyond bounds, and A'lá-ud-dowlah sat on the throne, he turned his attention towards its correction, and took counsel with his nobles⁴, as to the means whereby it was to be remedied. They all advised that the debased money should be called in, and the amount replaced by legitimate coin. A'lá-ud-dowlah accordingly ordered that they should issue millions of dirhams⁵ from his treasury and take them to the mint, to be expended in the relief of 'the servants of the Lord' (the Moslems), so that his own good name might be diffused over all parts of the world⁶."

(without date), once in the library of Ranjít Sing; and, 3rd, an old large-paper copy, the property of H. T. Prinsep, Esq.

¹ جیتل is the word used in my MS. It does not, however, appear in either Sir H. M. Elliot's copy or that of Mr. H. T. Prinsep. The *Jital* or *Chital* is a measure of value of special currency in the Delhi series, at which capital our author wrote during the reign of Altamsh (A.H. 607—633). See remarks on "Jitals," in my "Supplementary Contributions to the Coins of the Pathán Sultáns of Hindustán," printed at Delhi in 1851, p. 30, and Reprint in the London "Numismatic Chronicle," vol. xv. p. 154.

² The text in my copy of "Jámi' al Hikáyát" is:—

بارزكانان از دارالاسلام مي آمدند و انرا مي خريدند و بخراسان
مي بردند
The passage is not so fully given in Mr. Prinsep's MS.

³ The exact words used are و مس و روي باز مي خريدند

⁴ In my MS., "the merchants" are the authorities stated to have been consulted on this occasion.

⁵ An imaginary sum; the original expression is صد بار هزار هزار

⁶ I have already partially illustrated, from the statements of Indian authors,

ARSLAN.

No. 38—(To follow No. CXL., Old Series, p. 369).

Silver and Copper. Weight 32 gr.—Colonel T. Bush.

REV.

السلطان
الاعظم
ملك ارسلان

OBY.

श्री समन्त देव

Figure of the Bull (Nandi).

the simple and easy process by which the Eastern Mint-masters coined money (Journal, ix. 281). The following account of the means employed for this end in India, almost to the present day, will give a more vivid idea of the facilities enjoyed by the evil disposed, under Native governments, for forgery and the production of debased coin :—

"March 22, 1848.—Pind Dadud Khan visited the Mint here, which is under the superintendence of Misser Rula Ram. Silver is collected in all directions in the shape of old rupees, bangles, and silver ornaments, which, after being refined, are converted into the new Lahore rupee. . . . The silver being obtained of sufficient purity to constitute the new rupees, which are said to be pure silver, it is cut into bars about the breadth of a rupee, and handed over to an artificer, who cuts these into the necessary weights to constitute the rupees. This being done, the rough bits of silver are heated to redness on hot charcoal, and when hot are beaten on an anvil with a round-headed hammer into the shape and size of the standard rupee. In this state they are handed over to a man who finishes them by impressing the necessary inscription, which is done on a die of the most simple description, being an anvil with a round and highly-tempered steel surface, on which the inscription is engraved in reverse. On this the rupee is placed, and on it a punch with a round and highly tempered steel face, on which the inscription to be impressed on the upper side of the rupee is carved. The punch being applied to the rupee, a smart blow from a heavy hammer is given by a man who stands in front of the one in charge of the die, and who holds the punch in his left hand, and a handful of raw rupees in his right, the lower die being firmly fixed in a strong case. In this way forty rupees were passed through the die, well engraved, in one minute; and the artificer said, that on an average he could engrave [strike] 1500 per hour."—Dr. Fleming's Diary of a Trip to Pind Dadud Khan and the Salt Range in the Punjab. Jour. As. Soc. Bengal, vol. xviii. (1850) p. 667.

BAHRAM SHÁH.¹

No. 39.—(To follow No. CXLVI., Old Series, Journal, vol. ix. p. 371.)

Silver. Size 1½. Weight 7 gr. (damaged coin).—*Masson (E. I. H.)*

Obverse. السلطان الاعظم ع

Reverse. السلطان الاعظم بهرامشاه ع

Ornamental Margins.

¹ I do not definitively assign the coin from which the subjoined legends are taken to Bahrám Sháh, for several reasons, without, however, having much doubt of its having issued from his mint. It will be seen that the legends are very imperfect. The first title of *يمين الدولة* is most crudely formed; the second, *ابوالفتح*, is not used on his other coins; and, finally, his name is only conjecturally deciphered.

As regards the obverse surface, the designation of the Khalif creates no difficulty, but the absence of the name of Sanjar, while suggesting a grave doubt as to the due attribution of this piece, in itself constitutes its interest in the question it gives rise to, as to whether it may not have been struck during a period when Bahrám had temporarily failed in his allegiance to that potentate.

No. 39 a.

Silver. Weight gr.—*Masson (E.I.H.)*

REV.

• • •

السلطان الاع

يمين الدولة

ابو الف

بهرام

OBV.

جلال

لا اله الا

محمد رسو

المقتفى لامرال

امير المؤمنين

Margins filled in with dots.

*General Table of Mint Cities and combined Dates deciphered on the
Coins of the Ghaznavis.*

Kings.	Mint Cities.	Dates.
Alptagín ..	Anderábeh ..	A.H. 347, No. 1 ¹ .
Bulkatagín ..	Ghazní ..	A.H. 359, No. 1, N.S.
	Balkh ..	A.H. 324, note, p. 143, N.S.
Subuktagín ..	Ferwán ..	A.H. 380, No. 2; 382, No. 3; 383, No. 4; 384, No. 5.
Mahmúd ..	Balkh ..	A.H. 411, No. 40; 412, No. 45; 421, No. 51.
	Ghazní ..	A.H. 395, No. 25, and No. 10, N.S.; 399, No. 27; 401, No. 36; 405, No. 54, and No. 16, N.S.; 406, Fræhn; 411, Nos. 43, 44; 414, No. 7a, N.S.; 415, No. 7, N.S.
	Hirát ..	A.H. 395, No. 14; 401, No. 15; 411, No. 16; 413, No. 17, and No. 6, N.S.; 414, No. 18.
	Nishápúr ..	A.H. 385, No. 8; 386, M. Soret (p. 379, Journal); 390, Nos. 9, 10; 399, No. 26, and No. 4, N.S.; 400, No. 11; 401, Nos. 12, 13; 403, No. 5, N.S.; 405, No. 8, N.S.; 407, No. 19; 409, No. 20; 413, Fræhn; 414, No. 41; 421, No. 9, N.S.
	Sejestán ..	A.H. ? No. 48 ² .
	Wáwálín ..	A.H. ? No. 29.
	Bukhárá ..	A.H. 412, Fræhn.

¹ The simple numbers refer to the old series in the Journal for 1848; the numbers in this paper are distinguished by the addition of the letters 'N.S.' Simple dates where unaccompanied by mint identifications are omitted from this list—excepting only in certain instances, where even in default of the definite name of the locality, the typical peculiarities of the coin itself authorize its legitimate assignment to a given city.

² (Khalaf bin Ahmad, A.H. 355, No. 1, N.S.; 375, No. 3, N.S.)

Kings.		Mint Cities.	Dates.
Mahmúd	..	Karmíná ..	A.H. 389, Fræhn.
		Mahmúdsar ..	A.H. 412, No. 42, and Nos. 11, 12, N.S.; 419, Nos. 13, 14, N.S.
Muhammad	..	Wáwálin ..	A.H. 411, No. 17, N.S.
		Júzján ..	A.H. 414, No. 18, N.S.
Masaúd	..	Balkh ..	A.H. 428, No. 63.
		Ghazní ..	A.H. 423, Nos. 21 and 22, N.S.; 428, No. 23, N.S.
		Nishápúr ..	A.H. 422, No. 58; 431, No. 59.
		Wáwálin (?) ..	A.H. ? No. 64.
Modúd	..	Ghazní ..	A.H. 433, No. 77; 434, No. 82, and No. 27, N.S.; 435, No. 78.
		Láhór ..	A.H. ? No. 92.
Abd ul Rashíd ..		Ghazní ..	A.H. 440, No. 93; 441, No. 94; 442, No. 95.
		Láhór ..	A.H. ? No. 28, N.S.
Farukhzád	..	Ghazní ..	A.H. 450, No. 101.
Ibrahím	..	Láhór ..	A.H. ? No. 129.
Masaúd III.	..	(Ghazní) ..	A.H. 494, No. 134.

With a view to consistency, I have retained in the above Table the old arrangement of the mint-cities, the relative positions of which were determined, in the original classification of the numismatic series, without reference to geographical grouping, being made simply to follow the order in which they chanced to occur in the general sequence of the coins, while the subsequent additions from external sources were necessarily inserted in the summary recapitulation¹ with even less regard to their appropriate places in the list.

The following eleven localities up to that time deciphered were distributed as follows:—A Balkh, B Ferwán, C Ghazní, D Hirát, E Láhór, F Nishápúr, G Sejistan, H Wáwálin, I Anderábah, J Bukhárá, K Karmínia.

To these may now be added the dubious reading and unascertained site represented on the Hindí coins of Mahmúd (L), and the more positive decipherment of Júzján (M).

I proceed to notice such new developments of the early geography of the first series as the labours of modern enquirers may have brought to light subsequently to the publication of my previous essay, concluding with a brief survey of the information bearing upon the province represented by the new mint-mark of Júzján.

¹ Journal, ix. p. 376.

GEOGRAPHICAL SUMMARY.

B *Ferwán*, as it is written, or *Parwán*, as it is indigenously pronounced.—In addition to the copious references by writers of various epochs embodied in the note at p. 297, vol. ix., J.R.A.S., it may be interesting to complete the more ancient notices of this town as traced by M. St. Martin, from the data afforded by Ptolemy.

"Nous retrouvons ici Kapisa, et Kaboura (appelée aussi Ortospa) qui nous sont déjà connues. Parmi les autres localités énumérées, il en est encore un certain nombre que nous pouvons identifier d'une manière au moins très-probable, grâce aux détails que les récentes explorations Anglaises nous ont procurés sur la topographie de ce canton. Παριάνα, au pied même du Paropanisus, et dans la partie la plus haute du pays vers le nord, est indubitablement Parouan, à la tête de la vallée de Pendjehir, non loin de la passe de Khévák, qui débouche au nord sur la vallée d'Andéráb. Au-dessous de Parouan, dans la même vallée, un lieu du nom de *Basáarak*, où il y a des vestiges d'antiquité, nous indique le site de Barzaura, Βαρζαῦρα. Nous retrouvons également Βαρσάρα dans Parvan, lieu notable du même canton, situé dans le douab que forment les rivières de Pendjehir et de Ghodrband, et qui donne son nom à une des passes de l'Hindou-koh. Parwan, comme Bazáarak, garde les traces d'un site ancien." Étude sur la Géographie Grecque et Latine de l'Inde, Paris (1858) p. 67.

For later notices of this site, see also Kánún-i-Masáúf بروان اول کابل and Ibn Batoutah, Paris edit., vol. iii. p. 87.

H *Wáwdlín*.—In my earlier paper I had assembled under one view a series of extracts illustrative of the nomenclature and true position of this mint. Though in default of any very definite orthography on the then available coins, added to the discrepancies to be detected in the method of expressing the name in the geographical MSS. of the period, I was compelled to leave the determination of the site a somewhat open question, and even to offer for consideration two alternative readings and attributions, which had other data to recommend them.

The writing on coin No. 17, N. S. now enables me to revert with more confidence to the identification first proposed, and in spite of still existing variations in the spelling of the name on the different pieces, to associate it with وروالین—the favourite orthography in the most authentic MSS.¹—and which may be taken to represent a city of

¹ The Luknow Ashkál-ul-bilád has transformed this name into ورواگیر See Col. Anderson's paper, Jour. As. Soc. Bengal, xxii. p. 152.

some importance, not far removed from the position of the modern Kundúz¹, which, in the process of time and intermediate changes of site, may be assumed to have eventually replaced the older city as the district metropolis.

L *Mahmúdsar*.—The reading of the name of this mint as ماحمودسر is so purely conjectural, that I refrain from speculating at any length upon its correctness, further than pausing a moment to justify the proposed termination, which, though unusual, is not by any means improbable; as instances occur of a somewhat similar combination in the earlier nomenclature of a town not very distantly removed from the possible site here indicated, where the capital of Karmán is defined in the old Pehlvi as كرمانسر = وركمانسر. It is true that this form alternates with كرمانان = وركمانان, and كرمانهفت = وركمانهفت (as it is dubiously figured), but I suppose the meaning of the three leading terms to be identical, as referring to the provincial capital, to the first of which the more definite addition of سر would scarcely be inappropriate. See Jour. R.A.S., xiii. 404, Pl. i.

M *Júzán*.—The mint which figures under the Arabic form of the name of جوزجان, indicates the then capital of the subdivision of the province of Khorásán, known locally as كوزكان or كوزكانان. The designation is familiar to us from the days of the early Arab conquest², when

¹ See note upon Kundúz. M. St. Martin, *Mem. Analytique* (Hiouen Tshang), ii. p. 288. Major Cunningham identifies the O-li-ni of Huen Tshang with the Valín of the Arab geographers (J.A.S.B., xvii. 54). M. St. Martin is not satisfied with the conclusiveness of this assignment (*Mem. Anal.*, p. 420).

² See *Journal R. A. S.*, xii. p. 299. Tabarí here notices it in association with Mervairúd and Tálakán. It is indifferently written as كوزكان or كوزكانان. The government is also prominently mentioned by the same author so early as A.H. 31 (A.D. 651–2.) on A'b'dullah bin A'mar's reconquest, when the new distribution of A'mar's lieutenancies on this occasion is detailed as follows:—

عبدالله قيس بن هشيمرا برنیشابور خلیفه کرد و احنفرا بمرو
تا بلخ و کوزکان و حنیف بن عبیدرا برهري و بادغیس تا حد
غور و خراسان

Huen Tshang, who visited these countries at a still earlier period (Circa, A.D. 630.) refers to the province of Júzán; though the details and particulars of its then existing government furnished to his biographers have not been preserved to us, the following is M. St. Martin's note on the subject:—

“ Pendant son séjour à Balkh, Hiouen Tshang vit arriver plusieurs personages envoyés par les rois de Jouï-mo-tho et de Hou-chi-kien, pour obtenir de lui qu'il

the dependency seems to have been held in higher consideration than it retained in after times. I now recognise its denomination in the Pehlvi form of $\text{وون-وس} = \text{کشکان}$, which occurs on the coins of U'baidullah bin Zíád of the year A.H. 63¹. The Arab geographers of proximate date to the Ghaznaví dynasty refer only irregularly to the locality, but from their statements we gather the names of the principal towns, which sufficiently determine the general position of the province. Of the leading cities the modern maps still display the representatives of Maimunah and Shibbergán, and the ancient positions of Tálakán and Fáriáb are sufficiently determined; the smaller urban subdivisions are more difficult to define. Albírúní's list embraces the following localities, to which I have appended the latitudes and longitudes as given, under the Arab system, in the text of his Kánún.²

1. اسلمح في ابلد $(34^{\circ} 30' - 88^{\circ} 40')$.
2. الطالقان $(34^{\circ} 55' - 88^{\circ} 25')$.
3. الفارياب $(36^{\circ} 45' - 89^{\circ} 20')$.
4. الميمنه و هو يهودان $(36^{\circ} 5' - 89^{\circ} 50')$.

vint à leur cour. Il se rendit, quoique à regret, à ces invitations honorables, et ce fut pour lui une occasion de recueillir sur ces pays des renseignements qu'il a consignés dans ses Mémoires (Hoeï-li les a supprimées). Jouï-mo-tho était un petit pays . . . situé dans la montagne, vers le sud-ouest de Balkh; Hou-chi-kien, état beaucoup plus important (500 li de l'est à l'ouest, 1000 li du sud au nord), était au sud-ouest de Jouï-mo-tho. . . .

"Hou-chi-kien nous paraît devoir se rapporter au district de Djouzdján (nom que les Persans prononcent aussi Djouzkán), entre Balkh et le district de Mèrou-er-rôûd. On peut voir les éclaircissements instructifs que Silvestre de Sacy a donnés sur le nom et la situation de ce district dans son 'Mémoire sur deux provinces de la Perse orientale.' (Tiré des Mines d'Orient et reproduit dans les Annales des Voyages, 1813). Nous ne trouvons ni dans les auteurs Musulmans, ni dans les sources plus modernes, aucune indication qui nous puisse fournir la synonymie du nom de Jouï-mo-tho."—St. Martin, Mém. Analytique; Hiouen Tsaang, ii. 289. See also Histoire de la vie de Hiouen Tsaang (Stanislas Julien), Paris, 1853, p. 67.

¹ See Coin No. 14, p. 291, vol. xii. J. R. A. S.; and also mint No. 65, p. 404, and Plate I. No. u, Vol. xiii.

² These figures with all their imperfections should be reasonably valid *inter se*. I may note that Mervahrûd is placed in $34^{\circ} 30' - 86^{\circ} 40'$; Bámfán in $34^{\circ} 55' - 92^{\circ} 50'$; and Balkh in $36^{\circ} 41' - 91^{\circ} 5'$.

³ The Mirdásid ul Ittilá has the following note on Jázján:—

جوزجانان و جوزجان هما واحد بعد الزای جیم و فی الاولى نونان
اسم كورة و اسعة من كور بلخ بين مروالروڤ و بلخ و يقال لقصبتهما
اليهودية

5. السبورقان (36° 45' — 90° 5').
6. امدركصبه الجوزجان [Anbár?] (34° 5' — 90° 55').
7. سمكن (35° 45' — 92° 40').

The Ashkál-ul-bilád¹ and Edrisi omit Nos. 2 and 3, which are held to pertain to Khorásán, and add the following in detail :—

8. انكد رستاق
9. كندرزوم
10. شار (Edrisi سان)
11. مرسان (Edrisi فرسان)²

Colonel Anderson's translation of the Askál-ul-bilád supplies a few particulars regarding the several cities :—

"Of these Anbár is the largest, being more extensive than Mervál-rúd; it is the residence of the Sultán, and situated among the hills . . . Sán is a place of no extent . . . Yahúdíá [No. 14.] is more extensive than Sán . . . Shubergan [No. 5.] is of greater extent than Kundaram [No. 9.] . . . Murshán [No. 11.?] equals in size Yahúdíá. Sírokh (No. 7.?) is a town, Andkhod (No. 8.), a small one, on the plain, having seven villages attached to it." The itinerary describes the relative distances as follows :—

From No. 5. to No. 4. (viâ No. 6.), distance not given.

- | | | |
|---|---|--|
| " | " | 8. Two marches to the N. |
| " | " | 9. Four marches, three to the river and one beyond it. |
| " | " | 6. One march S. (Edrisi, S.W.) |
| " | " | 3. Three marches (Ed., 54 miles). |
| " | " | 2. Six marches. |

¹ Anderson, Jour. As. Soc. Beng., xxii. 152.

² See also Ouseley's Oriental Geography, p. 221.

A P P E N D I X.

GHORÍ DYNASTY.

IN introducing the following detached notices of the coins of the Ghorí and other dynasties, immediately succeeding the Ghaznavis, I have prepared for the better illustration of the extant examples of these more than ordinarily rare local currencies, a full list of the kings and sub-kings of the different branches of the Ghorí race, who ruled severally at Fíróz-kóh, Ghazní, and Bámián.

The series of these names and titles have been extracted from the *Tabakát-i-Násirí*, a work I have previously had occasion to commend, but which, in this section of its history, is far less complete and lucid than I could have desired.¹ The lists of designations have been retained in their original Oriental form, with a view to the more ready identification of the corresponding nomenclature in the legends of the coins.

Notwithstanding that the statement of the family successions and the geographical distribution of the several kingdoms is somewhat complicated and involved, I have considered it best to follow the text of my authority, even in its defective integrity; endeavouring at the same time to connect and systemize, in some measure, the original arrangement—which adheres neither to the order of time nor to the division of kingdoms—by interpolating additional letter references to the names of the monarchs who often figure in two or more of my author's detached lists; adding to the whole a running commentary in the form of foot notes, corresponding to the numbers in the leading series of names.

¹ In addition to the Persian text of two MSS. of this work (No. 1952, E.I.H., and No. 12, R.A.S.), I have availed myself of M. Dorn's translation of this division of Mirchond's *Rausat-as-Safá*, appended to the history of the Afgháns (London, O. T. Fund, 1829), and M. de Frémery's *Histoire des Sultáns Ghourides*, from the Persian text of the same author, illustrated by valuable notes, which appeared in the *Paris Journal Asiatique* for 1843.

TABLE I.—FÍRÓZ-KÓH.

No. 1.	Names.	Titles.
	فولاد بن شنسب (Interval.)	
2.	بخي نهاران (Interval.)	
3.	امير سوري	
4.	مكحمّد بن سوري	
5.	ابوعلي بن مكحمّد	
6.	عبّاس بن شيش	
7.	مكحمّد بن عبّاس	
8.	قطب الدين - حسن عبّاس	

Notes to the Series of Kings.

1. Contemporary of Abú Moslim, who was Governor of Khorásán from A.H. 129 to 137. (Hamza Isfahání, p. 172.)

2. This name is doubtful. MS. E.I.H. gives it indifferently *بكجي* and *پكجي*. Elliot quoting the Jahán árâ, makes it *بنكجي بن نهادان*. He seems to have been a contemporary of Harún Alrashíd's. (A.H. 170 to 193.)

3. Our author acknowledges difficulties about this portion of his history, and after adverting to the disadvantages of writing at Delhi, at a distance from local sources of information, he concludes —

بضرورت آنچه از تاريخ ناصري و تاريخ ابن هيضم تابي صاحب
تاريخ ابو الحسن هيضم بن مكحمّد تابي] و بعض سماعي كه از
مشايخ غور حاصل شده بود در قلم آمده از ناظران رجا عفو مي باشد

4. A contemporary of Mahmúd of Ghazni, imprisoned and killed by the latter. *Rauzat-us-Safá*, De F. p. 17. Dorn's *Hist. Afghána*, pp. 77, 78, and 81.

5. Under Mahmúd, displaced by No. 6. during Mas'úd's reign. Mirkhond omits Nos. 5, 6, 7, and quotes authors who make Hasan, No. 8, succeed directly to Muhammad bin Súri, whose son he is reported to have been. Mirkhond properly points out the suspicion attaching to this statement. Deffrémery, p. 18. Dorn, 82.

6. Shíah was the son of Muhammad bin Súri, No. 4. A'bbás was eventually deposed by Ibrahim of Ghazni, and his son Muhammad appointed in his stead.

	Names.	Titles.
9.	حسين بن حسن	عز الدين
9. a E.	سوري بن حسين	سيف الدين

9. I have retained the orthography of these names as given by the author from whom I quote, though I am able to set him right in the true designation of the father of A'la-ud-din Jahānsoz. The attempted determination of this point, as well as the doubt existing as to A'la-ud-din's own name, has given rise to much debate and discussion among Oriental writers (Dorn quoting Mirehond, p. 83; De Frémery, citing various authorities, p. 26). The coin of Fakr-ud-din Mas'ūd (No. 51, *infra*) distinctly proves that the father of the seven brothers was called "Hasan," and not "Husain." Minhāj bin Sirāj quotes the following tabular form of the territorial possessions assigned to the seven sons of A'iz-ud-din Hasan:—

	Name.	Rank.	Kingdom.
A 12.	شهاب الدين محمود	ملك	مادين و غور
B.	فخر الدين مسعود	"	باميان و طخارستان
C 13.	شجاع الدين علي	"	حرماس و غور
D 14.	علا الدين حسين	سلطان	غور و غزني و باميان
E 9A.	سيف الدين سوري	"	غور و غزني
F 11.	بيا الدين سام	"	غور
G 10.	قطب الدين محمود	"	غور و فيروزكوه

Mirehond raises doubts as to the relative positions of Saif-ud-din Sūri and Alā-ud-din Jehānsoz (De F. 24, 27.; Dorn, 83, 84.) Minhāj's expressions are definite enough as to the former's succession to the supremacy among the brothers, and Ibn Athīr (Def. 24, note) is distinct as to his independent action from the time of his conquest of Ghazni, in Jumād ul Awal, A.H. 543, up to his defeat and destruction by Bahrām Shāh in Muharrim, A.H. 544.

9a. Saif-ud-din Sūri (E.) succeeds his father A'iz-ud-din Hasan (No. 9.), and distributes the local sovereignties among his brothers; Fīrōz-kōh falls to the share of قطب الدين محمود, who, in Minhāj's general list, is placed tenth in the order of succession, and a special series of accessions at Fīrōz-kōh is hereupon introduced into the body of the text in the following order:—

- 10 G. قطب الدين محمود Is killed at Ghazni by Bahrām Shāh. T. N.; also De F. p. 18; and the same author (quoting Ibn Athīr) p. 24. Dorn, p. 82.
- 11 F. بيا الدين سام بن الحسن Accession at Fīrōz-kōh, A.H. 544. T.N.
- 12 A. شهاب الدين محمود Succeeds to the kingdom of Mādīn and a portion of Ghōr.
- 13 C. شجاع الدين علي Obtains the kingdom of حرماس and part of Ghōr.

	Names.	Titles.
14 D.	حسین جهانسوز بن حسین	علا الدین -
15. Interregnum.	حسین ماکماد مادینی	ناصر الدین -
16.	ماکمد بن حسین جهانسوز	سیف الدین -
17.	ماکمد بن سام	غیاث الدین -
	(Mu'iz-ud-din Muhammad bin Sam,—see p. 194.)	
18. (Son of No. 13.)	ماکمد بن ملک شجاع الدین علی	علا الدین -
19. (Son of No. 17.)	ماکمود بن غیاث الدین	غیاث الدین -
20.	سام بن ماکمود	بها الدین -
21. (Son of No. 14.)	اتسز بن علا الدین	علا الدین -
22. (No. 18. Reaccession.)	ماکمد	علا الدین -

14 D. Alâ-ud-din's destructive expedition against Ghazni is preferably dated in A.H. 550. I. A., 106; Dorn, 80; De Guignes, ii. 184. Other authors assign this event to the year 547. De F., p. 25. His death took place in Rabi'ul-Akhir A.H. 556, I. A., 189; De F., 32; Dorn, 86.

15. Interregnum while A'lâ-ud-din is with Sanjar.

16. Succeeds his father A'lâ-ud-din Jahânsôz,—a short reign of little more than one year. He is killed in Rajab A.H. 553. I. A. See also Lubb ul Tâwârîkh and Jahân-ârf, quoted by Elliot, *Historians of India*.

17. Takes Ghazni from the Ghuzz (الغز) in A.H. 569; captures Hirât in 571; dies on 7th of Jumâd-ul-Awal, A.H. 599; Tabakât Nasirî also, I. A. p. 117, Jahân-ârf, &c. Minhâj-us-sirâj states that he reigned 43 years, but this seems to be two years too much, unless his accession is dated from A'lâ-ud-din Jehânsôz's death, and before he himself adopted the style and title of Sultân, in illustration of which see Coin No. 1, Supplement, O. S., Jour., p. 377. (Abûl fidâ, iii. 523.)

18. On Ghîâs-ud-din's death, his brother Muiz-ud-din distributes the local governments as follows:—

1. Firôz-kôh and Ghôr to A'lâ-ud-din, No. 18.
2. Bust, Furrah, and Isfarâr to Mahmûd bin Ghîâs-ud-din.
3. Hirât to Nasir-ud-din Ghâzi.

This prince (No. 18), who had previously been called Zîâ-ud-din, was entitled Alâ-ud-din on his accession; after reigning four years he was displaced by Mahmûd.

19. Killed 7th Safar, A.H. 607, T. N. and R. S.

20. Reigned about three months. Firôz-kôh is stated to have been taken by No. 21. in Jumâd-ul-awal, A.H. 607.

22. After a second reign of little more than one year, finally surrenders Ghôr to the Khwârizmîs, in A.H. 612.

TABLE II.—GHAZNÍ PROPER.

	Names.		Titles.
I. E.	سوري	—	سيف الدين
I. D.	جهانسوز	—	علا الدين
II.	ماحمد بن سام	—	معز الدين
III.	بن بهالدين الباميانى	—	علا الدين
IV.	يلدز	—	تاج الدين

I. E. Takes Ghaznî from Bahrâm Shâh in the fifth month of A.H. 543, and holds it until its recapture by the latter, in Muharrim, A.H. 544, on which occasion he is put to death by Bahrâm.

I. D. A'lâ-ud-dîn Jehânsôz captures and pillages Ghaznî in A.H. 550, but does not subsequently occupy or retain the territory.

II. Muiz ud-dîn Muhammad bin Sâm is inducted into the government of this kingdom by his brother Ghîâs-ud-dîn (No. 17. of the Ghorî line), on its conquest in A.H. 569, from whence his expeditions into India commence; in A.H. 571, against Multân; in 572, against Uch and Nahrwâlla, where, in A.H. 575, he suffers a defeat. The next conquest is Pershâwar, and two seasons are devoted to operations against Lâhôr. In A.H. 577 Khusrû Malik makes terms; A.H. 578 witnesses Muiz-ud-dîn's expedition against Daibal: and Lâhôr is occupied by his forces, who are, however, attacked by Khusrû Malik; and finally, in A.H. 582, Khusrû surrenders.

Muiz-ud-dîn was killed on the 3rd of Shabân A.H. 602.

III. Alâ-ud-dîn, the son of Bahâ-ud-dîn of the Bâmîân line, obtained temporary possession of Ghaznî shortly after the death of Muiz-ud-dîn. After various alternations of fortune in his repeated contests with Tâj-ud-dîn Ilduz, he was finally dispossessed by the latter in A.H. 603.

IV. Tâj-ud-dîn Ilduz was the slave, and subsequently the trusted general of Muiz-ud-dîn. He seems to have been invested at an early period with the charge of the important frontier position of Karmân, with which was at times associated the governorship of the metropolis itself. These posts he held, with not unvaried fidelity, till the death of his sovereign, when his own power, and the weakness of the divided sections of the regal line, enabled him to advance pretensions which ended in his ejecting the Bâmîân branch of the Ghorîs from Ghaznî, and eventually obtaining a full recognition of his own kingship from Ghîâs-ud-dîn Mahmûd, who had succeeded to the family honours at Firôz-kôh. Ghaznî was taken by Alâ-ud-dîn Muhammad Khwârizmî in A.H. 612.

The two coins which head the present list are remarkable (independent of the unusual size and weight of No. 39), in their being manifestly posthumous medals of the great conqueror, whose name they bear, struck most probably by his ancient servitor and latterly

trusted general, who, shortly after his master's decease, on two occasions, expelled a scion of the royal house from the imperial metropolis. The anomalous position in which Ilduz found himself at this juncture, may well explain his motive for resorting to a coinage of this description, in preference to continuing the current style avowing himself a slave¹, committing himself prematurely by an issue in his own independent name, or compromising his future freedom of action by the definite recognition of a living superior whom he designed to supersede.

Ilduz, it must be remembered, was still virtually a slave, as such professing allegiance to his late sovereign's nephew and heir, Ghíás-ud-dín Mahmúd, but taking advantage of this pretended vassalage to wage war against the Bámián branch of the Ghorí family, who contested perseveringly the possession of Ghazní. The time had not yet come when he could safely throw off the mask, and it was not until the final defeat of the sons of Bahá-ud-dín in A.H. 603², that he at length determined upon the overt act of causing his own name to be recited in the public prayers³, a proceeding which Mahmúd was at the moment so little able to resent, that he shortly afterwards conceded the desired manumission, and with it the insignia of royalty, conveying the patent of Táj-ud-dín's right to the kingdom of Ghazní.

¹ See Nos. 5 and 7, Old Series; also No. 42, *infra*.

² Ibn Athir, among the events of A.H. 602, relates that when Ilduz got possession of Ghazní from Alá-ud-dín, he made a display of obedience to Ghíás-ud-dín, except that he did not order the Khutbah to be read in his name, or in any one else's; but he had the Khutbah read for the Khalif, and prayed for mercy on Shaháb-ud-dín (i.e. Muiz-ud-dín) the Martyr—p. 145.

On the subsequent occasion of the capture of Ghazní from Alá-ud-dín, in A.H. 603, Ghíás-ud-dín is stated to have written to Ilduz to claim to have the Khutbah read in his name; on a repetition of this demand, Ilduz directed the Khatib to read the Khutbah in his *own* name, after the prayer for mercy on Shaháb-ud-dín, p. 163.

Mínhá-j-us-Siráj tells us that Muhammad bin Sám's name was recited in the public prayers in the mosques at Delhi even unto the time when he himself wrote.

³ No. 6, Old Series, bearing the inscription reproduced below, possibly illustrates the earliest phase of Táj-ud-dín's independent coinage, wherein he alludes to his martyred lord, and styles himself "the great King, Sultán of the East," &c. I am bound, however, to add, that a doubt as to the exact period of the mintage of this piece is suggested by the imperfectly-preserved foot-lines of the date, which would best answer to an original die-definition of A.H. 612.

Obverse Area— السلطان الشهيد ماحمد بن سام

Reverse—

الملك المعظم سلطان الشرق تاج الدنيا والدين يلدز

Margin— هذابيلد غز * * شهور سنة

II. MU'IZ-UD-DÍN MUHAMMAD BIN SÁM.

No. 39.

Gold. Weight 320 gr. Size 10. Ghazni. A.H. 603. Unique.—*My Cabinet.*

REV. Square Area.	OBV. Square Area.
السلطان الاعظم	لا اله الا الله
معز الدنياو	محمد رسول الله
الدين ابو المظفر	الناصر لدين الله
محمد بن سام	امير المؤمنين

Obverse Margin. In four compartments—

هو الذي ارسل رسوله بالهدى ودين الحق ليظهره علي الدين كله

Reverse Margin. In compartments—

ضرب هذا الدينار ببغدة غزنة في شهر سنة ثلث وست مائة

No. 40.

Gold. Weight 96 gr. Size 7. Ghazni. A.H. 603.—*My Cabinet.*

Similar types and legends to No. 39.

No. 41.

Lead. Weight 46 gr. Size 3.—*Lady Sale's Collection.*¹

(Legends engraved in fine lines and admirably executed.)

Obverse Area. The Kalimah.

Margin. في شهر * * خمس مائة

Reverse surface—

عدل السلطان الاعظم معز الدنياوالدين ابو المظفر محمد بن سام

¹ Lady Sale's valuable collection, chiefly formed in Afghánistán, at a considerable outlay, has, I regret to say, been plundered and dispersed during the late disturbances in India. See Jour. As. Soc. Bengal, "Coin Collections lost during the late Rebellion," by G. H. Freeling, Esq., B.C.S., No. ii. of 1858, p. 169.

IV. TAJ-UD-DÍN ILDUZ.

No. 42—(A variant of No. 7, Old Series, Journal, ix. p. 380).

Silver. Weight 90 gr.¹ Ghazni, A.H. 6**.

Obverse Square Area—

لا اله الا الله محمد رسول الله الناصر لدين الله امير المؤمنين

Obverse Margin—

* — ببلدة عزنة في شهر سنة — و ستماية

Reverse Area—

السلطان الاعظم معز الدنياو الدين ابو المظفر محمد بن سام

Reverse Margin—

[عبد و مولا تاج الد] نيا و الدين يلدز السلطاني

¹ Including a small suspending loop.

XIX. MAHMÚD BIN MUHAMMED.

The ordinary copper coins of this prince, with the squarely-formed Arabic legends, and the Horseman in Toghrá reverse, are not uncommon ;¹ the following types are, however, rare, and hitherto unpublished :—

No. 43.

Silver and Copper mixed. Size 2½,—*Lady Sale's Collection.*

Obverse. — السلطان الاعظم
— — الدنيا والدين

Reverse. A rudely executed figure of an Elephant. Margin filled in with dots.

No. 44.

A similar Coin.—*Lady Sale's Collection.*

Obverse. فتح ماحمود — — —
بن ماحمود

No. 45.

Silver and Copper. Size 3. Talakán.—*Colonel Stacy.*

Obverse. — طالقان السلطان المعظم ابو —
— ماحمود بن

Reverse. The usual type of the Ghorí horseman.

¹ See coins of the Pathán Sultáns of Dehlí (London, 1847), p. 11. These pieces bear a legend of

السلطان الاعظم ماحمود بن ماحمود بن سام

TABLE III.—BĀMĪĀN LINE.

1. B. (No 9. فاخر الدين مسعود (بن عزالدین 9. No))
2. شمس الدين ما محمد بن مسعود
3. بهاالدين سام بن ما محمد
4. (Son of No 3.) جلال الدين علي
علا الدين مسعود Son of No 2.
 Interregnum while No. 4 is in captivity at Ghazni.)
4. Reaccession of Jalāl-ud-dīn A'īf.

Notes.

No. 1. is stated to have been established in the kingdom of Bāmīān by A'īf-ud-dīn Jehānśōz after the conquest of Ghanzī. On the first rise of Ghīās-ud-dīn, Fakr-ud-dīn aids him under the condition that all conquests in Khorāsān should pertain to the former, while the acquisitions in Ghōr should fall to his own share. The ultimate extent of his dominions is thus summed up by Minhāj-us-Sirāj:—

ممالك جبال سقنال [؟ سقنان place in another] و طخارستان تا
 در بوروبلور و اطراف تركستان تا حد سرخس و بدخشان همه در
 ضبط آمد

— Fakr-ud-dīn seems to have enjoyed a long reign; the date of his death, however, is not mentioned.

2. Assists the Ghōris against Sultān Shāh Khwārizmī at Rūdbār, and is elevated to the rank of Sultān on the occasion, and endowed with the appropriate symbol of a black umbrella. He further extended the boundaries of the kingdom, including the city of Balkh, &c. Neither the length of his reign nor the period of his decease are mentioned, though the date of the latter may be inferred from the history of his successor.




3. Mirkhond affirms that this prince reigned fourteen years. The Tabakāt-i-Nāsirī (in both MS. copies) gives the total as *four* years. The former is probably the more correct period. (See Ibn Athīr, under A.H. 594, 595, &c.) He died in A.H. 602.

4. Reigned in all seven years. Captured and killed by Muhammad Khwārizm Shāh.

I. B. FAKHR-UD-DÍN MASAUD OF BÁMÍÁN.

No. 46.

Silver. Size 4½. Weight 54 gr. Unpublished.—*Masson*, E.I.H.

REV.	OBV.
 محمد رسول الله ملك السيد مسعود بن الحسن 	 لا اله الا الله المستنجد بالله امير مدين

Margins filled in with dots, like the coins of Khusrú Sháh (Nos. 150–152, O. S.)

No. 47.

There is a second coin (size 5, weight 66 gr.) in the E. I. H. Collection, which satisfactorily confirms the above transliteration.

No. 48.

Silver, alloyed with lead. Size 2½. Weight 47 gr. Ferwán—*Masson*.

Obverse. عدل السلطان الاعظم مسعود

Reverse. An elephant, to the left; above which is the name of the mint, فروان

No. 49—(No. 23, Old Series, Journal, p. 386).

Silver and Copper. Weight 44 gr. (Three specimens in the *Masson* collection.)

Obverse. A rudely-formed figure of a Bull, facing to the left, apparently in a rising posture, with the tail erect; above the back of the animal, expressed in *Persian* letters, is the mint mark of فروان Ferwán.

Reverse. Area (in ill-formed *Kufic* characters)—

عدل السلطان الاعظم مسعود

Margin. Illegible.

3. BAĤÁ-UD-DÍN SÁM.

As the money of these Bámíán princes is exceedingly rare, I reproduce, for continuity sake, an abstract of the legends of Bahá-ud-dín's coins previously described in 1847.

No. 50.

Silver. Weight 52 gr.

Obverse. The Kallimah, in three lines; at the foot—{الناصر لدين
الله

Reverse.

السلطان الا عظم بهالد نيا والدين سام بن محمدا

Margins. Illegible.

No. 51.

Silver. Weight 12 gr.

Obverse. As above, omitting the Khalif's name.

Reverse. Words as above, in four lines, but differently distributed.

Margins. Plain and unengraved.

No. 52.

Silver and Copper. Weight 52 gr.

Obverse. Rude figure of a Horseman, facing to the right, holding a lance at the charge. Dotted margin.

Reverse. As in No. 50, with dotted margin.

No. 53 (Unattributed).

Silver and Copper. Weight 50 gr. Unique.—Colonel T. Bush. Plate, fig. 9.

Obverse. Kufic legend in three lines, unintelligible.

Reverse. Rude figure of a recumbent bull, above which are traces of the word فروان

Margin filled in with a seemingly unmeaning repetition of the Sanskrit letters वय

A'LA-UD-DÍN MUHAMMAD, BIN TAKASH, KHUÁRZIM
SHÁH (596 to 617 A.H.)

No. 54.

Gold. Weight 65 gr. Size 6. Badakhshán. Novelty.—Colonel T. Bush.

REV.

OBV.

بدخشا
السلطان الاعظم
علا الدنياو الدين
ابو الفتح محمد
بن السلطان

ن ن ن

لَا إِلَهَ إِلَّا
الله محمد
رسول الله
الناصر لدين

Margins illegible.

The gold coins of this prince are sufficiently common, and, as I have previously remarked, have been already described by Fræhn¹ and Wilson.² I have carefully examined the ample collection in the museum of the East India House with a view to discover any new dates and places of mintage, but the result of my scrutiny produces only the subjoined disproportionate list.

As I do not reproduce the legends on the areas it may be needful to intimate that they ordinarily add the words أمير المؤمنين at the foot of the obverse area above transcribed, while the reverse remains constant, as in Colonel Bush's coin now quoted, with the single exception of the بدخشان which constitutes its essential novelty. The obverse margin is filled in with the usual passage of the Korán, Surah ix. 33 and lxi. 9, while the reverse exhibits the legend—

بسم الله غرب هذا الدينار ببلده غزنة في شهور سنة ثلاث عشرة وستمائة

Ghazní, A.H. 613.

Other specimens of the same mint date respectively 614, 616, and 617 A.H.

¹ Recensio, pp. 146. 595.

² *Ariana Antiqua*. Pl. xx. fig. 28, p. 437. See also the article of M. Soret on the *Sultáns de Kharezm*, in the *Revue de la Numismatique Belge* (Bruxelles 1854), tome iv., p. 591.

No. 55.

In lately commenting on the Khwárizmí coins in Colonel Stacy's collection,¹ I observed—

"I confine my notice to a single coin, which is remarkable as bearing the name of a new mint, *Zamíndáwar*. The piece is of mixed silver and copper, in weight 48 grains. The Obverse and Reverse read through; but, singular to say, the marginal legends are completed thus—

Reverse. ابو الفتح محمد

Obverse. السلطان الاعظم علا الدنيا والدين

The inscription in the reverse circular area commences the word زمين and the obverse centre gives the completion of the name "زمین داور — داور"

No. 56.

In the Journal of the Asiatic Society of Bengal for April, 1837 (vol. vi. p. 293, Pl. xiv.), there first appeared a notice, by James Prinsep, of a coin similar to that now about to be described, which was supposed, among its other peculiarities, to bear on its obverse a Pehlvi legend², while it was seen to be connected in a near degree with the conventional "Bull and Horseman" currencies of the earlier dynasties, now definitively traced to have originated with the

¹ J. A. S. Bengal, xxi. p. 127.

² Prinsep's remarks are as follows:—"Fig. 2, a copper coin, also unique: it escaped my detection among a number of old Bukhára Musalmán coins, or it should have appeared along with the Bull and Horseman, or Rájput series, of December, 1835. It seems to link this curious outline group with the full-faced Sassanians of Vasudeva, &c.; for on the border of the obverse are Pehlvi letters. The features of the supposed face are barely admissible as such, even to the lowest estimate of native art. The horse on the reverse is more palpable, but it seems more like a *sughrá*, or flourish of Persian letters, than ever. It is also reversed in position, and has no Nágari legend."

"The coins of this genus, although we have found them connected with Delhi sovereigns and Máliwa rájas at one end of the series, evidently reach at the other to the Bráhmanical rulers of the Punjáb, and probably Kábul. They are procured much more abundantly at the latter place (and on the site of Taxila, according to M. Court) than in any part of India. Some of them exhibit on their reverse the style of Arabic now known to belong to the Ghaznaví Sultáns, while others agree rather with the Ghorí type, and contain known names of that dynasty."

Brahmans of Kábul.¹ On a late occasion, while conducting through the press a reprint of James Prinsep's "Numismatic Essays," I avoided expressing any decided opinion as to the language or character of the legend in question, at the same time I was able to satisfy myself that the reverse Toghrá, which reproduces in its reticulated flourishes the outline of the quondam Kábul cavalier, covertly emblemized the profession of faith of the Moslems, who had succeeded to the monarchies and coin devices of the more ancient Hindú race.²

The nearly identical piece engraved as No. 10. of the Plate which illustrates the present article, conclusively determines that the legends on the surfaces of this class of money are no where expressed in any

¹ See Journal Asiatique, September, 1844: Fragments Arabes et Persans, par M. Reinaud; also the letter addressed to M. Reinaud by M. A. de Longperier, on this subject, annexed to the translation of the former.

² My own comments on this piece were to the effect:—"In the absence of the coin itself, it would be rash to speculate upon the true purport of this obverse, or the tenor and language of the partially-visible legend. The reverse figure of the horseman, however, offers tempting material for the exercise of analytical ingenuity.

"That the lines of which the device is composed were originally designed to convey, in more or less intelligible cypher, some Moslem formula, there can be little question. How much latitude in the definite expression of the letters was conceded to the needful artistic assimilation to the normal type, it may be difficult to say. But, though I should hesitate to pretend that my eye could follow the several letters of the full *kalimah* of **الله رسول محمد**, I have no doubt that those words are covertly embodied in the lines forming portions of the general outline. The Kufic **محمد** is palpable, when reading upwards from the front of the butt-end of the spear; portions of the **رسول** may be traced along the spear itself, and the rest may be imagined under the reasonable latitude already claimed; and, lastly, the **الله** may be conceded in virtue of its very obvious final **له**, which appears over the horse's hind quarters.

"The practice of reticulating words and names into device embellishments for the coinage was in high favour with Sámání mint-masters;* and we have numerous instances of a similar tendency among the Muhammadan races who succeeded to much of the civilization of the Bukhárá empire, with the modified boundaries or altered seats of government, incident to their progress towards the richer provinces of the south. To confine myself to a single exemplification, however, I may cite the Ghaznaví (Láhór) currency, with the recumbent bull in Tughrá on the obverse, and with a Kufic legend on the reverse.† In the lines of this ancient and revered Hindú device may here be read, in all facility and in two several directions, the name of the prophet of the Arabs, **محمد**"

* Fræhn's *Recensio Numorum Muhammedanorum*: Emiri Samanide. Petropoli, 1826.

+ *Es. gr.*, see Jour. Roy. As. Soc., ix. Pl. iii. fig. 153, O.S.

thing but Arabic letters. The word عدل, in the upper division of the centre of the very Chinese-looking obverse device, is palpable in its modernised Kufic form; while on the lower margin, in a similar style of character, may be doubtfully traced the footlines of the name of Muhammad, which, in addition to its typical identities, sufficiently associates the coin with the A'lá-ud-dín, Muhammad of the present list, to whom, I think, it may safely be assigned.

No. 57—(To precede No. 10, Supplement, O. S., Journal, p. 381.)

Silver (alloyed with lead?). Size 2½. Weight 40 gr. Hirát.—*My Cabinet.*

Obverse. السلطان الا عظم محمد بن السلطان

Margin dotted.

Reverse. The Ghori horseman, with both arms upraised. Above the horse's hindquarters the name of هراة

No. 58—(To follow No. 16, O. S., Journal, p. 383.)

Silver and Copper. Size 3. Karmán.

Obverse. The usual short legend—

السلطان الا عظم ابو الفتح محمد بن سلطان

Reverse.¹ A modified design of the Bull of Siva, ordinarily peculiar to the coins of Ilduz (No. 9, O. S., p. 380), with the word كرمán² inscribed on its ornamental housings. Sanskrit inscription above the Bull, imperfect रमन्त

¹ Owing to a defect in my original note upon the subject, I am unable to say positively whether this particular reverse belongs to Ilduz or Muhammad bin Takash. However, as the sole interest of the piece consists in its geographical record, I have associated it with the coins of the like locality bearing the name of the latter monarch.

² This name of Karmán does not refer to the extensive province of that designation, but to a city noticed in Ibn Athír as situated between Ghazni and Láhór.

I. A., ii. p. 140. كرمán مدينة بين غزنة و لهاور elsewhere (i. p. 103) he

adds وسكانها قوم يقال لهم ابغان See also Geographical Index, *infra*.

No. 59.

A second similar coin has the word Karmán introduced beneath the Bull.

No. 60.

Silver and Copper. Size 8.

Similar to Coin No. 58, but the word عدل replaces the كرمán on the Bull's side.

No. 61.

Coin similar to No. 58, but with a change in the name on the housings of the Bull, which here reads پشور (Pesháwar.)

No. 62.

Copper. Size 4½. Shibberkán.—Colonel T. Bush.

Obverse Circular Area—

لا اله الا الله محمد رسول [الله] النا صر [لدين] الله
Margin filled in with dots.

Reverse Centre. سفورقان

Margin. Int. السلطان الاعظم محمد بن السلطان
„ Ext. Filled in with dots.

List of Ghorí and other Mints.

1. *Badakhshán.*
Alá-ud-dín Muhammad bin Takash .. No 54, N.S.
2. *Bámíán.* Lat. $34^{\circ} 50'$, Long. $67^{\circ} 48'$.
Alá-ud-dín No. 12, O.S.
Fakhr-ud-dín Masaúd .. . No. 46, N.S.
3. *B. Ferwán.* Lat. $35^{\circ} 9'$, Long. $69^{\circ} 16'$.
Fakhr-ud-dín Nos. 48, 49, N.S.
(?) No. 53.
4. *C. Ghazní.* Lat. $33^{\circ} 34'$, Long. $68^{\circ} 18'$.
Muiz-ud-dín Muhammad bin Sâm. .. Nos. 39, 40, N.S.
Táj-ud-dín Ilduz No. 6, O.S., and
No. 42, N.S.
Alá-ud-dín under No. 54, N.S.
5. *D. Hirát.* Lat. $34^{\circ} 22'$, Long. $62^{\circ} 9'$.
Alá-ud-dín No. 57, N.S.
6. *Karmán.* About Lat. $33^{\circ} 40'$, Long. $70^{\circ} 20'$.
Táj-ud-dín Ilduz No. 9, O.S.
Alá-ud-dín Nos. 58, 59, N.S.
7. *Pesháwar.* Lat. $33^{\circ} 59'$, Long. $71^{\circ} 40'$.
Alá-ud-dín No. 61, N.S.

No. 1. The town of Badakhshán of this period is placed, by the early Arab geographers, at seven days' journey, to the northward of east, beyond Tálakán (the Talikhán of the modern maps, lat. $36^{\circ} 46'$, long. $69^{\circ} 30'$). Müller Liber Clímatum, *Istakhrí*, p. 112. Ouseley, *Oriental Geography*, p. 230. See also Wood's "Oxus," p. 251.

No. 6. Karmán seems to have been a place of considerable importance in these days, in virtue of its position on the line of communication between Ghazní and the Indus, on the road connecting that city with the modern site of Kohát and Pesháwar, by the Bungush route and the Kurm river. A village of the name still exists in the locality probably occupied by the early seat of government. See *ante*, note on Coin No. 58. Also Yákrút's *Mushtarik, in voce*. Elphinstone's *Cabool*, i. 420; ii. 421. H. T. Prinsep, *Jour. As. Soc. Bengal*, xi. 553. Ferishtah, Persian text, lithographed at Bombay, p. 110; Brigg's translation of ditto, i. 200, 201, &c. Price's *Muhamadan Hist.*, ii. 309. Elliot, *Historians*, p. 23.

No. 7. The name of this city is variously written برساوور - فرشابور and برشور Reinand, *l'Inde*, 247. Ferishtah, Bombay lithog. text, p. 98.

8. *Shubbergán*. Lat. $36^{\circ} 40'$, Long. $65^{\circ} 30'$.
 Alá-ud-dín No. 62, N.S.
9. *Tálakán*.
 Mahmúd bin Muḥammad No. 45, N.S.
10. *Zamindáwar*.
 Alá-ud-dín No. 55, N.S.
-

No. 8. *Shubbergán* is described by Burnes (*Cabool*, p. 227), as "a very ancient place, being supposed to date from the days of the Kaffirs (Greeks), and is still the strongest fort in these parts; the ark or citadel is built of brick and mortar, and surrounded by other walls of mud." See also *ante*, 188; Marco Polo, edit. 1818, p. 121, 123; and Gladwin's *Ayín-i-Akbarí*, &c.

No. 9. This is the *Tálakán* in Juzján, which must not be confounded with the city of the same or nearly similar name in Tokháristán, situated to the eastward of Kundúz. See *ante*, p. 188. The second city is discriminated in many of the early geographical authorities, by the independent orthography of الطایقان *Kánún*. Ashkál ul bilád, map, p. 152. Ouseley, 230. *Mirásid ul Ittilá*, *in voce*.

No. 10. Elphinstone defines the boundaries of the ancient Bilád-al-dáwar, under its more modern name, in the following passage:—"Still further up the river [than Girishk] on its right bank, lies the rich country of Zemeendawir, which has the Paropamisan mountains on the north, and some hills connected with that range are found within its limits. This fine country extends for forty or fifty miles to the west of the Helmund." *Elph.*, *Cabool*, 4to edit., p. 122. Lieut. Macartney's map, which illustrates the work, places the province in about $32^{\circ} 33' \text{ N.}$, $64^{\circ} 65' \text{ E.}$ Albérúfí, under his *Aráb* system, gives the position of بل قصبه ارض الداور [Tall] as $38^{\circ} 30'$, $90^{\circ} 10'$. *MS.*, *Kánún*. See also Müller's *Liber Climatum*, Table xvii. No. 54, p. 104. Reinaud, *Mem. sur l'Inde*, p. 173.



1



2



3



4



5



6



7



8

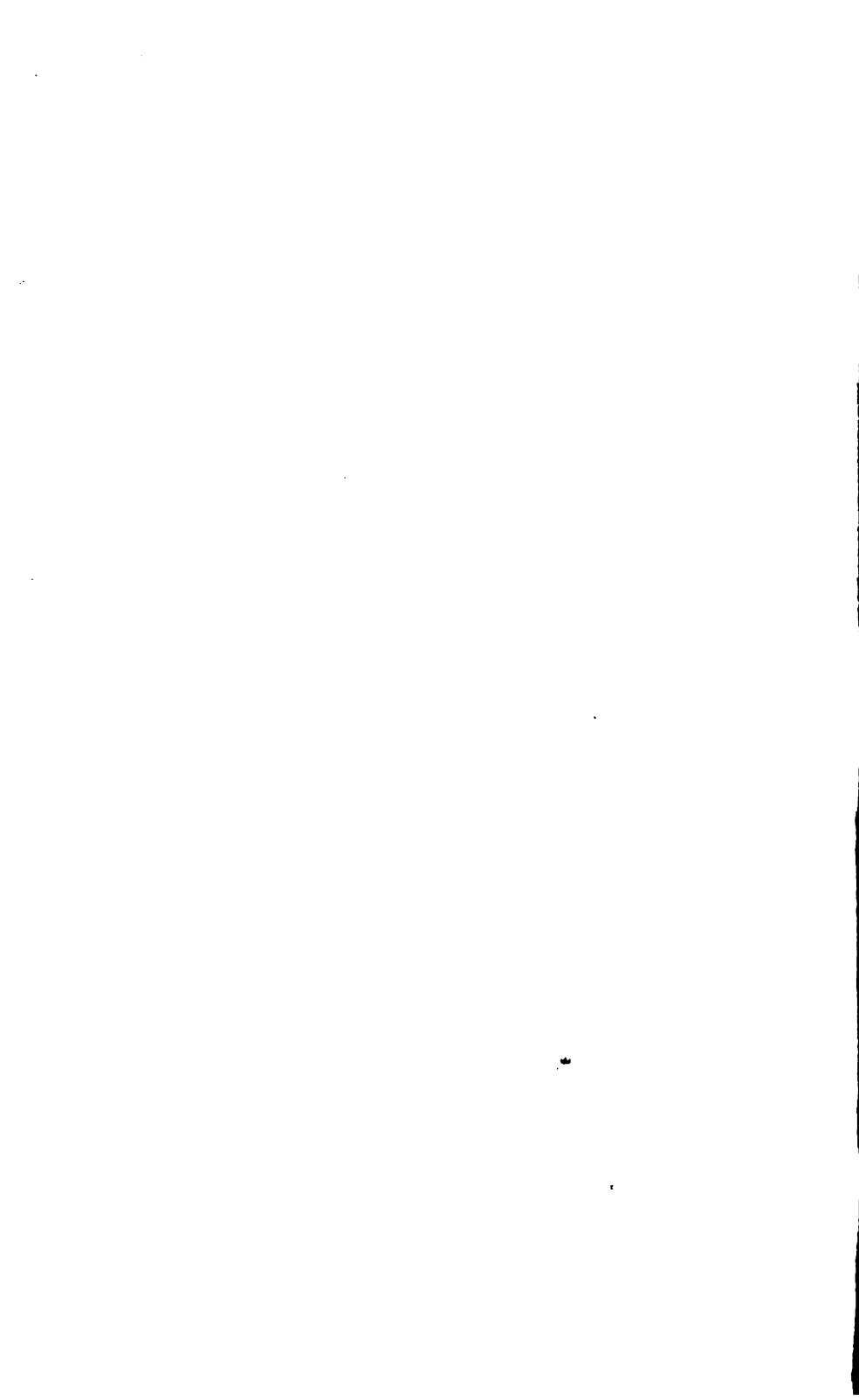


9



10





ART. VI.—*Remarks by Raja Radhakanta Deva, on Art. XI., Journal Royal Asiatic Society, Vol. XVI, p. 201; with Observations by Professor H. H. WILSON.*

[Read 19th March, 1859.]

THE sixteenth volume of the Journal of our Society, has given insertion to a communication made by me, on the supposed authority of the Vedas, for the burning of Hindu widows, in which I have shown that the passage quoted as enjoining the practice, and as published by Mr. Colebrooke, in his Paper in the Asiatic Researches, upon the "Duties of a Sati or Faithful Widow," had been either purposely or accidentally wrongly read, and that so far from authorizing the rite, its real purport was the reverse; and that it expected the widow to repress her affliction and return to her worldly duties. This view was entirely confirmed by the explanation of the passage given by the celebrated commentator, Sáyana Achárya, and by the precepts of Aswaláyana, cited by Professor Maximilian Müller, published in continuation of my remarks on the same occasion. The revised reading has not proved acceptable to the Pandits of Calcutta, and the following letter is the expression of their sentiments. The writer, a friend of many years, Raja Radhakant Deb is well known as a leading member of the Native Society of Calcutta, who adds to the distinction of rank and station, that of a foremost place amongst Sanskrit scholars, as evinced by his great Lexicon or Literary Encyclopædia of the Sanskrit language, in seven quarto volumes; the Sabdakalpadruma, which enjoys a European as well as Indian celebrity. Any opinion coming from him on subjects connected with the ancient literature of his country is entitled to the greatest deference. The question of the authority for the Sati cremation is now, as he rightly observes, a matter merely for literary discussion, but as it is not without interest for the historian and antiquarian, his remarks will, I doubt not, be highly acceptable to those scholars who are engaged in the investigation of the ancient religion and history of the Hindus; and as he has no objection to their being laid before the public, I have thought it advisable to request a place for them in the Journal, although, as I

shall subsequently explain, they have not induced me to modify in the least my opinions on the subject, as my esteemed correspondent seems to anticipate.

MY DEAR DR. WILSON,

Although the abolition of the practice of *Sahamarana* in the British Indian territories has legally set the question at rest, and deprived it of all interest in the public eye, yet its discussion will always afford pleasure to the historian and antiquarian, and has its peculiar value in a literary point of view.

The perusal of your very interesting article "On the supposed Vaidic authority for the burning of Hindu Widows, and on the Funeral Ceremonies of the Hindús," which appeared in the *Journal of the Royal Asiatic Society of Great Britain and Ireland*, vol. xvi. part i., having induced me to inquire whether any trace of this custom can be found in the Vedas, I have made certain discoveries and come to a conclusion, which I believe, would lead you to modify considerably the opinion you have formed on the subject.

The most explicit authority for the burning of a widow with her deceased husband, is to be found in the two verses of the *Aukhya Sákha* of the *Taittiriya Sanhitá*, quoted in the eighty-fourth *Anuváka* of the *Náráyaniya Upanishad*, of which I give the following literal translation, and subjoin¹ the original text with the commentary of *Sáyanáchárya* :—

¹ Text. अग्ने व्रतानां व्रतपतिरसि पत्यानुममव्रतं चरिष्यामि
तच्छ्रेयं तन्मे राध्यतां ॥ १ ॥ Com. हे अग्ने कर्षसाधिन् ।
यतः त्वं व्रतानां प्राजापत्याद्यस्त्रिव्रतानां व्रतपतिरसि ।
पुनर्व्रतग्रहणं त्वमेव व्रतानामधिपतिर्नाम्य इति विचमबो
धनाय ॥ तस्मान् मयाचर्यमाणं यत् सांप्रतिकं व्रतं तद्यथाहं
कर्तुं शक्यं तथाराध्यतां क्रियतामित्यर्थः । धातूनामनेका
र्यत्वात् । किं त्वयाचर्यमाणं तद्व्रतमिति पत्यानुममेति पत्या
भर्ता सह अनुसृत्यगमनव्रतं चरिष्यामि करिष्यामीत्यर्थः ॥

1. "Oh! Agni, of all Vratas¹, thou art the Vratapati², I will observe the vow (Vrata) of following the husband. Do thou enable me to accomplish it!"

2. "Here (in this rite), to thee O Agni, I offer salutation; to gain the heavenly mansion I enter into thee (wherefore), Oh Jataveda³; this day, satisfied with the clarified butter (offered by me), inspire me with courage (for Sahagamana) and take me to my lord."

Agreeably to this general Vaidic injunction, the Sutrakāras direct that the widow, like the sacrificial utensils of a Brahmana, should be made to lie upon the funeral pile of her husband, and accordingly as he was a Brahmana, Kshetriya, or Vaisya, a piece of gold, a bow, or a jewel is to be respectively placed thereupon.

To the widow so placed beside the lifeless body of her husband, the Mantras beginning with "... Udirshwa, &c.," and "Suvāna goong hastāt, &c., Dhanurhastāt, &c.," or "Manigoong hastāt, &c.," are to be addressed⁴ to her by her husband's brother or fellow-student, accordingly as he belonged to the priestly, military, or mercantile class.

Text. इह त्वा अग्ने नमसा विधेय सुवर्गस्य लोकस्य समेत्यै ।

जुषाणो अद्य हविषा जातवेदो विशानि त्वा सत्त्वतो नय मा पत्युरये ॥ Com. हे अग्ने इह अग्निन् कर्षणि । त्वा त्वा मु

दिश्य । हविषा हविर्भागेन । नमसा नमस्कारेण च । विधेयं नमो विदधामीत्यर्थः । किमर्थमित्युक्तौ तच्चाह । सुवर्गस्येति सुवर्गस्य पतिसंप्राप्यलोकस्य । समेत्यै सम्यक् प्राप्यर्थः । त्वा त्वयीत्यर्थः सप्तम्यर्थं द्वितीया क्कान्दसी । विशानि प्रविज्ञानि अत एव अद्य अग्निन् दिने । हे जातवेदः हविषा महत्तेन हविर्भागेण । जुषाणः सन्तुष्टः सन् । सत्त्वतः सत्वमार्गप्रदर्शनद्वारा सहलग्नमनसिषयक साहसप्रदानद्वारेति यावत् । मा मां पति माचैकदेवतां पत्युः मम भर्तुरये समक्षं नय प्रापयेत्यर्थः ॥

¹ Vowed or voluntary observances.

² Lord of Vratas.

³ Source of the Vedas.

⁴ The first part of the address beginning with "Udirshwa," &c., is the same in respect of the funeral of the first three classes: by this Mantra the widow is requested to leave the corpse and to return to her abode. The remaining three Mantras are to be addressed to the widow of a Brahmana, Kshetriya, and Vaisya

If the widow thus addressed has not made up her mind for her immolation, she obeys the call ; but should she be firm in her resolve, she consoles her friends and relatives, and enters the fire.

Extracts¹ from Bharadvāja and Aswaláyana, and from the Saha-

respectively, whereby she is required to lift up from the funeral pile the respective symbols of the deceased, and therewith to rub his hands. This call forms an important part of the ceremony.

¹ अथैनं चितावुपर्यधूहृत्यचैव वा पत्न्याः संवेशना क्रियत इति ॥ Bharadvāja's Sūtra, Prasna 1.

अथैतानि पात्राणि योजयेद्दक्षिणे हस्ते जुहूं सव्य उपभृतं दक्षिणे पार्श्वे स्थं सव्ये अग्निहोत्रहवणीमुरशि ध्रुवां शिरशि कल्पानानीत्यादि Aswaláyana's Grihya Sūtra, Adhyāya iv. 3.

उत्तरतः पत्नीं ॥ Com. ततः प्रेतस्योत्तरतः पत्नीं संवेशयन्ति । शाययन्तीत्यर्थः । चितावेव उपशेष इति लिङ्गात् । एतावदण्यत्रयस्यापि समानं ॥ Ib. Adh. ii. 3.

उदीर्घ्वनार्यभिजीवलोकं गतासुमेतमुपशेष इति । हस्तग्रामस्य दिधिषोस्तवेदं पत्युर्जनित्वमभिसंबभूय ॥

हस्तौ सप्ताष्टिं सुवर्णेन ब्राह्मणस्य सुवर्णं हस्तादिति । धनुषा राजन्यस्यधनुर्हस्तादिति । मणिना वैश्यस्य मणिं हस्तादिति ॥ Bharadvāja's Sūtra.

तामुत्थापयेद्देवरः पतिस्थानीयोऽन्नेवासी जरहासो वोदीर्घ्वनार्यभिजीवलोकमिति Aswa, ii. 2.

उत्तरतः पत्नीं । तां प्रेतस्योत्तरतः सुप्रां सत्त्वरहितां देवरः शिष्यो वा करे धृत्वा नमस्कृत्य उदीर्घ्वेति दाभ्यामुत्थापयेत् । सत्त्वाधिकास्तु खयमेव सुहृदः संबन्धिनः पुत्रांस्यसमामन्त्र्य भर्तारं विष्णुरूपं धृत्वा हुताशनं प्रविशेदित्युक्तं ॥^{*} Sahamaranavedhi.

* Her (the widow) lying on the north of the deceased, if she want courage, her husband's brother, or fellow-student, or old servant shall, by reciting the two

maranavidhi, a work of much repute in Drávida, are quoted below in elucidation of these practices. From these Vaidic and Sautric injunctions have been derived the rules and directions for the immolation of the Sati, in the Smritis and Puránas.

After having thus shown the Vaidic authority for the Sahamarana, I shall offer some observations upon the conclusions you have drawn, on perusing the seventh and eighth Verses¹ of the second Sūkta of the second Anuváka of the tenth Mandala of the Rigveda.

In the first place, on referring to Raghunandana's *Suddhitattwa*, whence Colebrooke derives his materials for his "Essay on the Duties of a Faithful Widow," published in the fourth volume of the *Asiatic Researches*, we find the author citing a verse² from the Rigveda and a passage³ from the *Brahma Purána*, in order to show that the Veda authorizes *Sahamarana*. You suppose this verse to be an incorrect reading of the seventh Rich above alluded to, and support your reasoning by the Commentary of Sáyana and the directions of Aswaláyana.

Now, the shortest way in which our pandits would dispute this opinion, would be to assert that for aught that we moderns know, Raghunandana's citation may be altogether a different verse from the seventh Rich, and may be found somewhere, in any of the five Sákhas⁴ of the Rigveda; inasmuch as the same verse, with slight variations of reading, and hence with different import and application, often occurs

¹ इमा नारीरविधवाः सपत्नीराञ्जनेन सर्पिषा संविशन्तु ।
अनश्रवोऽनमीवाः सुरत्ना रोहन्तु जनयो योनिमये ॥ १ ॥

उदीर्घ्वं नार्यभिजीवसोकं गतासुमेतं उपशेष एहि । हस्तया
भस्त्रं दिधिषो स्तवेदं पत्युर्जनित्वमभिसंबभूथ ॥ ५ ॥

² इमा नारीरविधवाः सपत्नीराञ्जनेन सर्पिषा संविशन्तु ।
अनश्रवोऽनमीवाः सुरत्ना आरोहन्तु जनयो यो निमयेः ॥

³ अमेदेवादात् साध्वी स्त्री न भवेदात्मघातिनी ॥ *

⁴ आश्वलायणी, सांख्यायनी, शाकला, वाष्कला, माण्डूकेयी

Mantras *Udirahwa*, &c., raise, holding her by the hand and saluting her; but if she have sufficient courage, she bidding adieu to her friends, relatives, and children, and contemplating the Vishnu-like form of her husband, enters the fire.

* "The loyal wife (who burns herself) shall not be deemed a suicide."

in the different Vedas, in various Sākhās of the same Veda, and sometimes in different places of the same Sākhā of a Veda. The objection to the use of the epithets "Avidhavá" and "Sapatni," whereby you suppose the reason for burning to be wanting, can be easily answered by supposing the Sati (whose soul is, as it were, wedded to that of her husband), not to be widowed; actual practice, when it prevailed in India, may be considered as confirmatory of this opinion. The Sati, in making preparations for ascending the funeral pile, used to mark her forehead with Sindura, and to deck herself sumptuously with all the symbols of a Sadhavá.

But so long as the proper place of the verse quoted by Raghunandana, is not pointed out, the occidental pandits, who are making wonderful progress in Vaidic learning, may regard it an idle assertion. I shall therefore, for argument's sake, grant Raghunandana's citation to be a false reading of the seventh verse in question.

On this supposition you may be justified in coming to the conclusion, that the genuine reading of the passage rather discountenances than enjoins Sahamarana; but by referring to the subjoined Sūtras¹ of Bharadvāja and Aswaláyana, wherein they specify the rites in

¹ नवम्यां व्युष्टायां यज्ञोपवीतीत्यन्तरायामं श्मशानं चाग्निमु
पसमाधाय संपरिस्तीर्यापरेणाग्निं लोहितं चर्मानुडुहं प्राचीन
वीवमुत्तरलोमास्तीर्य वेतसमानिनो ज्ञातीनारोहत्योरोहते
त्यथैनांननु पूर्वान् कल्पयति यथाहानीति प्रतिस्त्रोमकृतया
चारण्या सुचा द्वे चतुर्गृहीते जुहोति न हि ते अग्ने तनुव
इति दश च सुवाहुतीरअपनश्यो शुचदधमिति हुत्वापाश्यां
सम्पातयत्यन्नोभयं प्रहरति येन जुहोत्यपरेणाग्निं लोहितो
ऽनङ्गान् प्राङ् मुखोवस्थितो भवति तं ज्ञातयो ऽन्वारभन्ते
ऽनङ्गाहमन्वारभामह इति प्राङ्घी ऽञ्चन्तीमे जीवा इति जघन्यो
वेतसशाखया अवकाभिस्त पदानित्यलोभयते मृत्योः पदमि
त्यथैभ्यो ऽध्वर्युर्दक्षिणतो ऽश्मानं परिधिं दधाति इमं जीवेभ्यः
परिधिं दधामीति स्त्रीणामञ्चनिषु संपातानवनयतीमानारी
रिति तैर्मृगानि मृजन्ते यदाञ्जनं चैककुदमिति चैककुदे

which many of the verses of the tenth Mandala quoted by you, are to be respectively cited as Mantras, you will at once see what you rightly guess—that the verse in question has nothing to do with the concremation of a Sati; it is directed to be chaunted on the tenth day after the burning of the dead, when the relatives of the deceased assemble on the Smasana to perform certain ceremonies, on the conclusion of which, the Adhwaryu takes butter with a new blade of kusa grass, or clarified butter between the thumb and ring finger, and applying it, as collyrium, to the eyes of Sadhavás, 'recites the seventh hymn in question, the moment they are directed to depart towards the east.

Now, as the text, which has been supposed to authorize Sahamarana, clearly appears to be appropriated to quite a different occasion, the argument based upon its interpretation proving it to discountenance concremation, necessarily falls to the ground.

The succeeding verses (to wit, the eighth and ninth), as I observed before, are enjoined to be addressed to the widow, lying on the funeral pile of her husband, and therefore have no relation with the seventh.

Had there been no explicit Vaidic injunction for Sahamarana, these passages, taken by themselves, would certainly have justified the conclusion that the Rigveda prohibits or ignores, by these texts, the

नाञ्जनेनाङ्गे यदि चैककुदं नावगच्छेत् येनैव केनचिदाञ्जनेना
च्चिरिन् ॥ Bharadvāja's Sūtra, Prasna 1, Khanda II.

उत्तरस्त्राद्याग्निमुपसमाधाय पश्चादस्थानकुहं चर्मास्तीर्ष्य
प्राङ् पीवमुत्तरलोम तस्मिन्मात्यादीनारोहयेदारोहतायुर्ज
रसंवृणाना इति इमं जीवेभ्यः परिधिं दधामीति परिधिं
दध्यादन्मृत्युं दधतां पर्वतेनित्यस्थानमुत्तरतो ऽग्नेः कृत्वा परं
मृत्यो अनुपरेहि पन्थामित्यादि चतसृभिः प्रत्यृचं हुत्वा यथा
ज्ञान्यनुपूर्वं भवन्तीत्यमात्यादीनीचेत। युवतयः पृथक्
पाणिभ्यां दर्भतरणैर्नवनीतेनाङ्गुष्ठोपकनिष्ठिकाभ्यामाञ्जनेना
चिणी आञ्ज्य पराच्यो विमुञ्जेयुरिमा नारीरविधवाः सुपत्नो
रिति अञ्जना ईचेत। अग्न्यन्वतीरयिते संरभयमिति ॥ Aswalá-
yana's Grihya Sūtra, Adhyaya III.

self-immolation of a Sati, but when we find in the Aukhya Sākhā of the Taittiriya Sanhitā, the Sati's address to Agni while throwing herself into it, and thus discover the Vaidic sanction for concremation, we must pause before we regard the eighth verse as an authority against this tragic act.

The Mimāṃsākāra would argue thus,—“Where there are two authorities of a contradictory character, but of equal cogency, an alternative must be supposed to have been allowed¹.” The Sutrakāras, upon the Vaidic authorities above set forth, direct that the widow as well as the sacrificial utensils of the deceased Brahmana should be placed upon his funeral pile; but, as the widow has a will of her own, she cannot be disposed of like the inert utensils. The Rīgveda therefore gives her the option of sacrificing herself or not, according as she may or may not have her courage “screwed up to the sticking place.”

When the Sati lies on the funeral pile, it is presumed² she is inclined to immolate herself, and the eighth verse is addressed to her, as the author of the Sahamāranavidhi explains, only to test her resolution, and to induce her to retire, if she be not sufficiently firm in her purpose. The necessity of giving her this option and trying her fortitude beforehand, appears the more strong, when we find it declared³ that the Sati who becomes Chitābhrashtā, who retires from the funeral pile after the conclusion of the rites, commits a highly sinful act, although it admits of expiation by the performance of the Prājāpatya.

Our personal observation of the actual practice when it prevailed in British India confirms this view; from the moment a Sati expressed her desire to follow her lord, up to the time she ascended the funeral pile, every persuasive language was used to induce her to continue in the family, and to discharge her proper duties there, and it was not until she was found inflexible that she was allowed to sacrifice herself, this was perfectly in keeping with the Udīrshwa, &c., Mantra.

Thus the 8th verse of the Rīgveda, above alluded to, appears to

¹ तुल्यबलविरोधे विकल्पः ।

Gotama quoted by Kullukabhatta in his Com. on Manu, v. 14, B. 2, which see.

² Sāyana, when he says, in his Commentary on the 8th Rich; “Yasmāt anusarana nischayam ākārshih tasmādāgachchha,” he takes the same view; he does not consider the burning as delayed, as may be supposed from a technical interpretation of the word “anusarana,” because, as you say, subsequent burning is inconsistent with the presence of the corpse.

³ चिताभ्रष्टा तु या नारी मोहादिचक्षिता भवेत् ।
प्राजापत्येन युज्येत् तु तस्माद्विपापकर्षणः ॥

be, in fact, a Sahamarana Mantra, though its interpretation, apart from other considerations, may, on a first view, seem to discountenance the practice.

A very strong presumption in support of the opinion, that Sahamarana rests upon Vaidic authority, arises from the circumstance of its having prevailed in India in very remote times, when Vaidic rites only were in vogue. On referring to the Mahābhārata, for instance, we find the widows of the heroes slain in the battle of Kurukshetra consuming themselves in the funeral fires of their husbands, when there lived great kings and sages imbued with Vaidic learning, and devoted to the observance of Vaidic rituals.

Nearly two thousand years ago Propertius describes the prevalence of this custom in India, in a passage of which the following is a translation by Boysses (see Brit. Poets, Chalmer's Ed., Vol. 14, p. 563) :—

“ Happy the laws that in those climes obtain,
Where the bright morning reddens all the main,
There, whenso'er the happy husband dies,
And on the funeral couch extended lies,
His faithful wives around the scene appear,
With pompous dress and a triumphant air ;
For partnership in death, ambitious strive,
And dread the shameful fortune to survive !
Adorned with flowers the lovely victims stand,
With smiles ascend the pile, and light the brand !
Grasp their dear partners with unaltered faith,
And yield exulting to the fragrant death.”

Cicero, also, who lived about the same time, mentions this fact in his Tusculum Questions. Herodotus speaks of a race of Thracians, whose women sacrificed themselves on the tombs of their husbands : these people, as well as the Getæ by whom this custom was also observed, were perhaps some tribe of degraded Kshetriyas.

You may, if you think it worth while, read this paper at the next meeting of the Royal Asiatic Society.

I remain,

My dear Dr. Wilson,

Yours sincerely,

RADHAKANT DEB.

CALCUTTA, 30th June, 1858.

Observations.

In disproving the genuineness of the citation of the passage which had been quoted as authority for the Sati, I confined my objections to the particular passage in question, and in this respect the Raja is obliged to admit, that I may be justified in coming to the conclusion, that the genuine reading rather discountenances than enjoins Sati. This was all I maintained. Of course I never intended to deny, that there were numerous texts in the Sûtras and law-books, by which it was enjoined. I restricted my argument to the individual text quoted from the Rigveda, and with Raja Radhakant Deb's own concurrence, I have no occasion to modify the view I have taken, as limited to this object : the text of the Rigveda, that has been quoted as authority for the burning of the widow, is no such thing, "it rather discountenances than enjoined the practice." I have not expressed any opinion, whether any such injunction is to be found in any other part of the Sanhitâ of the Rigveda, or of the Sanhitâs of the White or Black Yajush, or the Sâmaveda. That is quite a different question, although, as the topic is started by the Raja, I may venture to intimate an opinion, that the burning of a widow will not be found even alluded to in the genuine text, the Sanhitâ, of either of the three principal Vedas. Whatever may be the antiquity of the rite, and that it is of long standing is not to be disputed, I suspect its origin is later than the Sanhitâ, or primary Vedic period. I have now translated, although not yet published, nearly the whole of the Sûktas, or hymns, the primitive portions of the Rigveda, and have yet found no notice of any such ceremony : the prohibition which would imply the existence of the rite, is matter of inference only ; the direction, that the widow is to be led away from the proximity of her deceased husband, does not necessarily imply that she was to depart from his funeral pile, and there is no term, in the text, that indicates such a position.

In the course of my translation of the Rigveda, I have had a great number of occasions to refer to the printed texts of the Vâjasaneyî Sanhitâ, of the Yajur-veda, published by Professor Weber, of the Sâmaveda printed by the late Mr. Stevenson and Professor Benfey, and I do not remember to have met with any allusion whatever in either of those works to the Sati ceremonial. There remains therefore only the Taittirîya Sanhitâ of the Black Yajush to be examined : a part only of this has been printed by the Asiatic Society of Bengal, in their Bibliotheca Indica, and, as far as it goes, the same absence of allusion to the Sati occurs : so far, therefore, I have reason to believe,

that the burning of widows was unknown to the Vedic period of Hindu ritual or belief.

That the Sūtras of Aswalayāna, Bharadwāja, and other Sūtrākāras contain Sūtras, or rules, for the cremation, is indisputable, but all Vedic scholars agree in considering these works as of much more recent date than the Sanhitā, or text period; they, therefore, prove nothing, and of still less weight are the Sakamārāṇa-vidhi or the Tatvas of Raghunandana, or other equally modern writings: the question is not whether there be any authorities at all for the practice, but whether such authority be discoverable in the original Vedic texts; there is no lack whatever of the former—I cannot yet positively deny, but I question the existence of the latter. To this Radhakant replies, “the most explicit (Vedic) authority is to be found in the two verses of the Aukhya Sākhā of the Taittirīya Sanhitā, quoted in the 84th anuvāka of the Nārāyaṇīya Upanishad,” of which he gives the literal translation as well as of the comment; unfavourably for his argument, the authority is liable to obvious exceptions.

In the first place, the two verses are not cited direct from the text of the Taittirīya Sanhitā itself; they are a quotation of a quotation, and, as in the case of the passage of the Rīgveda, which has given rise to this discussion, we know that quotations cannot always be trusted. The Pandits should have made a reference to the Taittirīya Sanhitā itself, and have given us chapter and verse for the passages; we should then be able to test their accuracy by collation with the printed text when complete. In the next place, the quotation occurs in an Upanishad, the Yajñikī, or Nārāyaṇīya: the Upanishad period is of doubtful determination, because the Upanishads, which are numerous, one list enumerating above a hundred, are evidently of widely different dates, and not unfrequently of equivocal character. The Nārāyaṇīya Upanishad is not altogether unexceptionable, for it constitutes the tenth Prapāthaka, or section, of what is usually considered a Brāhmaṇa, the Taittirīya Aranyaka; Śāyana calls it even khilarupā, or of the nature of an additional or supplementary section, so that it is scarcely acknowledged to be a part of the original Aranyaka.

Upon referring to the manuscripts of the library of the India House, another difficulty arises; neither text nor comment consists of more than 64 anuvākas, whilst the verses quoted by Radhakant, are said to be taken from the 84th anuvāka; consequently no such verses could be expected to be found in our copy, and accordingly they do not occur. Śāyana, however, observes, that different recensiors do exist, of which the Drāvīra has 64 anuvākas, the Andhra, 80, the Karnāta 74, others 89. There may be a copy belonging to a different Sākhā,

the Aukhya for instance, of which we have no copy, with 84 anuvákas. Sáyana, however, avowedly follows the Drávira recension, containing only 64 anuvákas, the actual number of two copies consulted, and in which no such passages are met with; whence then do the Pandits derive their scholia of the 84th? it is for them to give a satisfactory explanation. Therefore, as the matter stands, the verses cited, together with their commentary, wear a somewhat suspicious appearance, not the less observable that the different recensions specified are all named after the divisions of *Southern India*, where the Vedas did not penetrate probably till long after their compilation. Although, however, their authenticity be admitted, their occurring in an Upanishad, or even in a Bráhmaṇa, is no proof that the Saṁhitá of the Taittiríya Yajush contains them, or sanctions the burning of widows, or that the rite was cotemporary with the ritual of the Vedic period.

H H. W.

ART. VII.—*Note on the supposed Discovery of the Principle of the Differential Calculus by an Indian Astronomer. By W. SPOTTISWOODE, Esq. Communicated by the Director.*

IN the number of the Journal of the Asiatic Society of Bengal last received, No. III., of 1858, is a short article by Bapu Deva Shastri, Professor of Mathematics and Astronomy at the Government College of Benares, in which he has undertaken to show, that Bháskaráchárya, an astronomer who flourished at Ujjayin in the twelfth century, was fully acquainted with the principle of the Differential Calculus, one of the most important discoveries of the last century in Europe.

As this would have been a very remarkable circumstance in the history of astronomical science, it was obviously a matter of more than ordinary interest to have the accuracy of Professor Bapu Deva's statement carefully tested, and I therefore applied to our colleague, Mr. William Spottiswoode, who is well known as a mathematician, for his opinion; the answer with which he has favoured me will, I doubt not, be thought by the Society worthy of being communicated to the public through our Journal, especially as, whilst it shows that Bapu Deva's statement is not correct to its whole extent, yet it does full justice to Bháskaráchárya's penetration and science, and acknowledges that his calculations bear a very remarkable analogy to the corresponding processes in modern mathematical astronomy.

12, James Street, Buckingham Gate,
London, May 5, 1859.

MY DEAR MR. WILSON,

I have read Bapu Deva Shastri's letter on Bháskaráchárya's mode of determining the instantaneous motion of a planet, with great interest, and think that we are much indebted to him for calling our attention to so important an element in the old Indian methods of calculation. It still, however, seems to me, that he has overstated the case, in saying that "Bháskaráchárya was fully acquainted with the principle of the Differential Calculus." He has undoubtedly conceived the idea of comparing the successive positions of a planet in

its path, and of regarding its motion as constant during the interval, and he may be said to have had some rudimentary notion of representing the arc of a curve by means of auxiliary straight lines. But on the other hand, in the method here given, he makes no allusion to one of the most essential features of the Differential Calculus, viz., the infinitesimal magnitude of the intervals of time and space therein employed. Nor indeed is anything specifically said about the fact that the method is an approximative one.

Nevertheless, with these reservations, it must be admitted, that the penetration shown by Bhaskara, in his analysis, is in the highest degree remarkable; that the formula which he establishes (equation 3, p. 216), and his method of establishing it, bear more than a mere resemblance—they bear a strong analogy—to the corresponding process in modern mathematical astronomy; and that the majority of scientific persons will learn with surprise the existence of such a method in the writings of so distant a period and so remote a region.

With many thanks for communicating the paper to me,

I remain, very sincerely yours,

H. H. Wilson, Esq.

W. SPOTTISWOODS.

P.S. I may perhaps add, that if—

x, x' be the mean longitudes,

y, y' be the mean anomalies,

u, u' be the true anomalies

of a planet on two successive days; and a the excentricity, or sine of the greatest equation of the orbit; then $(u' - u)$, or the true motion of the planet,

$$= x' - x \pm (\sin. y' - \sin. y).$$

And Bhaskara's method consists in showing, that the "instantaneous" value of $\sin. y' - \sin. y$ (or the value which it would have if the velocity of the planet had remained uniform during the day) is $(y' - y) \cos. y$. His formula therefore becomes—

$$u' - u = x' - x \pm (y' - y) a \cos. y.$$

And the corresponding formula in modern analysis is—

$$\begin{aligned} du &= d(x \pm a \sin. y) \\ &= dx \pm a \cos. y dy. \end{aligned}$$

W. S.

ART. VIII.—*Traits of Indian Character.* By COLONEL SYKES,
M.P., *President of the Society.*

[*Read 16th April, 1859.*]

MUTABILITY.

IT is less my object in the present paper to give national characteristics than traits of individual character. To attempt the former with the twenty-one nations and twenty-one languages of India, and in the absence of trustworthy history, could only mislead, but with the latter, the richness of the field offers the assurance of a plentiful harvest. Nevertheless, as the twenty-one nations belong to the great family of man, there will necessarily be certain features common to them all, and I will give a running commentary upon such of these common features as occur to me. And, first, with respect to the long-received and constantly-repeated opinion of Western nations, of the immutability of the customs, habits, and opinions, whether religious or moral, of the nations of India; or at least of the Hindús. No doubt since the institution of caste, classes of men have been fettered and confined within certain rules, prescribing to them not only modes of action, but modes of thought. Nevertheless, we find that natural impulses, by leading to the irregular intercourse of the sexes, have broken down these conventional barriers, and that state of society which comprised only four great divisions, Brahman, Rajpút, Vaisya, and Sudra, has ramified into scores of castes, each with its own exclusiveness, its own habits, its own polemics, and its own inter-marriage limitations. Here has been ceaseless change, and ceaselessly is it going on. Moreover, anterior to the institution of caste, and before the establishment of Christianity, we have glimpses of the Indian social state, and for these glimpses we are indebted to the profound learning and indefatigable labours of our Director, Professor Wilson, and to the researches in Buddhist and Pali literature of the late Honourable Mr. Turnour, of the Ceylon Civil Service. The former has translated for us four Ashtakas, or one-half of the Rig Veda, the most ancient of the sacred books of the Hindús, and

the latter has translated the Mahawanso, the Dipawanso, and the sermons and discourses of Buddha. The Rig Veda comprises a series of hymns, addressed not to a supreme Being, a self-existent and constantly disposing cause, but to various personifications of the elements and heavenly bodies, chiefly the firmament and fire; then the winds, the personified dawn, the sun, the sons of the sun, the Viswadevas, or collective deities, and the divinities of food, water, and grass in the abstract; but nowhere does there appear to have been idols or worship of material objects. Temples there were none; the worship was domestic. Brahmans are mentioned, but are not named as the appointed or exclusive singers or reciters of the hymns of the Rig Veda. Priests were not necessarily Brahmans, and the head of the family would seem to have had whatever ritual was required, performed in his own house. The Hindú Triad, Brahma, Vishnu, and Siva, have no place; the Linga or Phallus is unmentioned; Caste unnoticed; cows were eaten; cow-hides used in sacrificial ritual; in short, modern Brahmanism has no prototype in the Rig Veda; but Professor Wilson justly says, that its chief value is in "illustrating the most ancient Hindu system of religious worship and social organization, and the opinions of primitive Hinduism. How prodigious then the changes which we find must have taken place amongst the so-called immutable Hindus!" But who were the Hindús? Professor Wilson says, "The earliest seat of the Hindus within the area of Hindustan was undoubtedly the Eastern confines of the Punjab; the holy land of Menu and the Puranas lies between the Drishadwati and Saraswati rivers; the Caygar and Sursooty of our barbarous maps." The tract of land thus assigned for the first establishment of Hinduism in India, is of very circumscribed extent and could not have been the site of a nation or of several tribes. Whatever the date of the settlement, Fa-hien, in the first years of the fifth century, says he found a people of heretics (that is to say, not Buddhists,) between the Indus and the Jumna, having previously said that the Brahmans were a tribe; the first amongst the tribes of barbarians, meaning strangers. And this is corroborated by Bishop Musæu and Scholasticus. But India was densely peopled at the time of Fa-hien's visit, and if the nidus of the Hindus was still in the Punjab, who were the other peoples of India? Buddhism then flourished from the Himalayas to Ceylon, but Hinduism has now engrafted itself upon the twenty-one nations and languages of India. How then has this change come about, and what becomes of the immutability of the Hindús?

Admitting, however, that the followers of the Rig Veda had diffused themselves so far south as the Vindya range,—limits which the Vishnú Purana of the twelfth century seems to indicate,—at the advent of Buddha in the seventh century B.C., the present deities of the Hindu Pantheon were unknown; we find that not only a new ritual, but new gods have been adopted, though the germs of both may be traceable to the Rig Veda. It will necessarily be asked; what led Buddha to the promulgation of doctrines which, in a comparatively short period, would seem to have almost extinguished the Vedic system, but which doctrines, nevertheless, were so unstable and uncertain, that at Buddha's death, 543 B.C., the first Buddhist convocation to fix the tenets of Buddhism in the Pitakattaya, took place at Rajgriha, and the convocation found it had to deal with no less than sixty-two heterodox sects. Heresy, however, progressed, and two other convocations were necessary¹. Considering that the fundamental doctrine of the Buddhists is the belief in the metempsychosis, the promulgation of this doctrine struck directly at a great feature of ancient ritual—animal sacrifices. The idea that the great First Cause could be propitiated by the sprinkling of blood, and burning flesh upon an altar, is coeval with the existence of man. Cain and Abel are the first on record to have made this sacrifice, and because one offering was supposed to be acceptable to God, and the other not, Cain slew his brother in envy. We see it continued in Abraham's offer, even of his son. We read of its institution, commanded by Moses in the 1st chapter of Leviticus as a daily duty of the Jews. We observe a remarkable illustration of it in Elijah's sacrifice, narrated in the 18th chapter, 1st Kings, and to this day Abraham's sacrifice is commemorated in the Buckra Eed of the Mahomedans. The Canaanites sacrificed hecatombs of oxen, and so strong was the belief in the efficacy of offering blood and flesh to the Divinity, that the ties of nature were set aside, and children were offered to Moloch. (Leviticus xviii. 21.) The Carthaginians offered men, and some traces of human sacrifices are met with in the Rig Veda, and its prevalence through all times, in one part of India, is attested by the Meriah sacrifices of the Khonds, which the British Government has so energetically and humanely endeavoured recently to suppress. The usual offering or sacrifice mentioned in the Rig Veda is the Soma Juice; the great sacrifice of the horse, however, is mentioned, and the ceremonial prescribed; and that animal sacrifices must have gradually grown up is manifest

¹ The second, 443 B.C., and third was 308 B.C.

by the horror expressed by Buddha in his discourses at the blood shed by the Vedists in their ritual; and as all religious as well as social reforms originate in the revulsion of certain sensitive and speculative minds from certain rituals or social usages, it may not be unreasonable to believe that the great reform of Buddha, whose followers at this day outnumber those of any other creed, was caused by the blood shed in India in animal sacrifices. Whether his making it sinful to destroy animal life was consequent upon his adoption of the metempsychosis or transmigration of souls, or whether the metempsychosis was invented to spare animal life, admits of argument.

The interdiction, although now practically disregarded by the Buddhists in all parts of the world, is reverently obeyed by the Jain heretical offshoot of Buddhism in India, the only remnant, in fact, of Buddhism; and we see the Jain priest, with bare head, white robe, with one shoulder naked, with a muslin veil over the mouth to prevent the ingress and destruction of insect life, solemnly promenading the thoroughfares with a black rod in one hand and a fan in the other, with which he fans the spot upon which he proposes to sit down, lest he should destroy any creature having life.

The reverence for Buddha's injunction is also manifested by the existence in Western India of hospitals, called Pinjrapol, not only for sick animals, but for all other animals, whose lives the supporters of the hospitals desire to preserve; and laughable but doubtless groundless stories are told of human beings allowing themselves to be hired to sleep in these hospitals to give the common bed bug (*Cimex lectularius*,) a comfortable meal at night! The Chinese Buddhists, though they do not give any practical effect to Buddha's injunction, yet admit the sin of its breach. In an account of the largest Buddhist temple at Canton, called the Ching Kwang Meaon, in the China Mail of the 6th January last, visitors are shown pictures of the punishments in the different hells, and in one hell those are tortured who have taken the life of any living being. But to return to Buddha's great reform: at his death, 543 B.C., a convocation took place to fix his doctrines in the Pali work, the Pitakattaya, and it was found they had to deal with sixty-two heresies. One hundred years later another convocation was necessary, and in 308 B.C. another; and notwithstanding the heresies the religion spread, and at the end of the fourth century and beginning of the fifth century, the Chinese traveller Fa-hien, who was fourteen years in India, found Buddhism covering the land from Peshawur to Cape Comorin, and from Guzrat to Orissa. Never-

theless, in the seventh century Hiantsang found Buddhism rapidly declining; its crushing monastic system had broken it down, its doctrines were perverted, the morals of the people corrupted, and Hiantsang says the Buddhists were scarcely distinguishable from the barbarians amongst whom they lived; that is to say, the followers of Siva and Vishnu, who not discoverable in the Rig Veda, had been ushered into notice and veneration, together with the lamentable system of caste, under the fostering care of the Brahmans, who were step by step assuming influence, importance, and exclusiveness. But, like the Vedic and Buddhist systems, the Brahmanism of the early and subsequent centuries of the Christian era was subject to its heresies. Professor Wilson, in the 16th and 17th volumes of the Asiatic Researches, has given an account of no less than fifty-two Hindú sects or heresies, viz., twenty Vaishnava sects, nine Siva, four Sakta, seven subdivisions of Seiks, who originated with Nanak Shah and Gúrú Govind, ten miscellaneous sects, and two Jains. Mahomedanism too, as is well known, has its Shihs and Súnis, its sophists and mystics; but I need not multiply these proofs to establish the fact, that in religious impressions and social usages, a trait of Indian character is certainly mutability, and not immutability.

DEVOTIONAL SENTIMENT.

A trait of Indian character is the intensity of "devotional sentiment." If we survey the rock-cut temples and sthupas of India, and monastic refectories and cells, we are struck with amazement at their prodigious magnitude, prodigious number, marvellous display of varied taste, and the amount of continuous labour bestowed upon their excavation through centuries of time; first, those of the Buddhists, divided into those excavated in the rock and buildings designated sthupas and topes; the Chinese travellers speak of sthupas seven hundred feet high, nearly twice the height of St. Paul's. These have disappeared; but many specimens of topes remain, a remarkable illustrative gigantic specimen of which exists to this day at Bilsa in Bopal. These topes or dhagopes were relic tombs. Associated also with the Buddhist excavations, first in order of time are those of the Jains, probably of the date of the early Christian centuries; then those dedicated to Siva, none of which have been proved to be earlier than the seventh century.

In my published account of the caves of Ellora I gave the measurements of the several excavations, and one of them, the Siva Temple of

Kylas, may well be considered a wonder of the world. A mountain of trap rock is carved into a temple, and sculptured externally with thousands and tens of thousands of figures of men and animals : the temple stands in the midst of a great excavated area, round which run cloisters, with panels in their walls, representing the avatars or incarnations of Siva and Vishnu.

The Hindus of Southern India in comparatively modern times have equally manifested the devotional sentiment in their colossal pagodas, such as those of Seringham, Conjeveram, and others. The Mahomedans also have shown it in their multitudinous and magnificent mosques and mausolea. In personal illustrations we find it in self-sacrifice and immolation. Calamus burnt himself on the funeral pile ; some of Buddha's followers who had attained the sanctity of Bodhisatwa did the same ; the Hindu devotee still buries himself alive in a sitting posture ; the aged but feeble, while still living, permit themselves to be exposed on the banks of a sacred stream to die of starvation, or to be devoured by wild beasts. The Sati still immolates herself in native states not under British control, upon the funeral pile of her husband's body ; and a remarkable anecdote is told by Sir John Malcolm of Alla Bae, the widow of Holkar and Regent of Indore, a woman of vigorous intellect and enlarged views. She declined to burn herself with her husband's body, but she so much respected the devotional sentiment that when her son-in-law died and his child-wife, her own daughter, resolved to become Sati, she did not consider herself at liberty to interfere with the self-sacrifice, and witnessed it. Again, the infatuated devotee throws himself under the wheels of the ponderous car of Juggernath, and is crushed, as he thinks, into heaven. I have fallen in with many poor people, male and female, in fulfilment of vows measuring their length for many miles, along a road to a celebrated temple ; I have seen many unhappy creatures with an arm held above the head until the nails have grown through the back of the hand, and the limb has become a fixture for life, withered to the bone, in fulfilment of a vow. Annually at the Churruck Pooja festival, in fulfilment of vows, men have a hook inserted into the muscles below the shoulder-blade, and are swung round the head of a tall pole.

I have already spoken of the Mariah sacrifice, the result of a false, but still devotional sentiment. The Mahomedans equally manifest it. At the celebration of the Maharum many work themselves up into a state of devotional frenzy, and cut themselves with knives, and the Ghazee is at all times ready to rush upon the infidel that he may

either kill or be killed, and in either case insure for himself the blissful abodes of the Houries ; finally, the late lamentable mutiny and its consequences, are chiefly attributable to reckless and unjustifiable resentment at a supposed intended outrage upon a religious belief, for the maintenance of which the Hindú is always ready to die. A remarkable declaration to this effect, is by one of the thirty faithful troopers of the 3rd Light Cavalry, sent to Umballa after the mutiny, from Meerut, who said to Lieutenant Martineau, the *Depôt Adjutant* at Umballa, in conversation, "We have followed the standards of our regiment through the snows of Affghanistan ; on the plains of the Punjab ; and wherever we have been ordered, and are ready at any time to shed our blood, or lay down our lives for the Sirkar (Government), but we thought we were told, and we believed that the Sirkar wanted to take away our religion ; and without our creed and our caste, what is life, Sahib ? 'isse jena marna behtar.' It is better to be killed."

This belief is attested by the letter of the Begum of Oude, addressed to Jung Bahadoor, dated 2nd February, 1859, in which she says "moreover the British have attempted to destroy the faith and religion of the people of India, which attempt has caused this great outbreak and mutiny."

Proofs of a genuine religious panic amongst the sepoys of the late Bengal army are daily accumulating ; and many of them are already furnished in the voluminous papers upon the mutiny laid before Parliament.

I need not go further ; the various illustrations which I have furnished above, sufficiently authorize me to maintain that "Devotional Sentiment" is a trait of Indian character.

I come now to the Point of Honour as a trait.

In 1764.—The 2-12th, or Lall Pultun of the Bengal army, which was at the battle of Plassy, mutinied in February, at Saut, imprisoned their officers, but released them and then went off. The reason alleged was that promises to them about prize-money were broken. The European Marines and Trevanion's Sepoy Battalion went in pursuit and brought the regiment back. Major Munro, who commanded the force in the field, ordered twenty-eight sepoys to be picked out and tried by drum-head court-martial ; the whole were sentenced to death. The eight guns with the detachment being brought out, the first eight sepoys were fixed to their muzzles and blown away. Here it was that three of the *grenadiers* entreated to be fastened to the guns on the right, declaring that as they always fought on the right, they hoped that their last request would be complied with, by being

suffered to die in the post of honour. Their petition was granted, and they were the first executed. I am sure (says Captain Williamson) there was not a dry eye amongst the marines who witnessed the execution, although they had long been accustomed to hard service, and two of them had actually been on the execution party that shot Admiral Byng in 1757. The other twenty sepoys were similarly executed at the other stations of the army (page 171).

General Briggs relates that at the siege of Bhurtpoor, in 1805, after the repulse of four assaults, and a fifth was ordered, an orderly havildar, on duty with Lord Lake, asked permission to join his regiment on that day; at first, he was refused, but being urgent he was allowed to go, telling Lord Lake, "the Sahib will never see my face again unless we succeed." The regiment got a footing on the rampart, but being unsupported, was obliged to retire. The havildar alone stood his ground, and was deaf to the entreaties of his comrades to come away; saying "Tell Lord Lake where you left me." He was seen at the top of the breach loading a musket, until he was shot down and then cut to pieces (page 45), *Briggs's Letters*.

In one of the assaults upon Bhurtpoor after the failure of several; the Second Battalion of the Twelfth Native Infantry moved out of the trenches, when a European regiment declined, on the ground of the breach not being practicable, and Lord Lake issued the following order:—

"Notwithstanding the distinguished and persevering gallantry displayed by the troops in the assault yesterday, and that the colours of the 2-12th were three times planted on the top of the bastion, the obstacles were such as not to be surmounted."

On that occasion, when a retreat was ordered, it was with great difficulty the men could be prevailed upon to withdraw, they yielded at length to the reiterated orders of their officers, after having repeatedly exclaimed "We must take the place or die here." Too fully was their determination verified, for in several of the corps employed, more than half of their number were either killed or wounded. Could any troops of any army in the world have acted more nobly or more devotedly in maintenance of the point of honour?

Amongst the Rajpúts it is not unusual to refuse to surrender to an enemy; but at the last extremity to rush sword in hand upon him and die to a man. Numerous instances of this kind took place in the wars, between the Rajpút States and the Mahomedans of Delhi; but a remarkable instance of it occurred within my own knowledge. The Rajpút Chief of Chaiya in Kattewar, a tributary of the Gaikwar was in open rebellion, and the British in compliance with treaty engage-

ments were called upon to reduce him to obedience. A force, therefore, in 1812, with a siege train sat down before the Raja's fort, trenches were opened, a battery planted, and a breach soon made. The artillery officers were the late Colonel Hardy and Lieutenant-General Manson, who was wounded. Preparatory to the storm the chief was invited to surrender, instead of which he and his garrison, cut the throats of their wives and children, threw their bodies into the wells, threw off their turbands, let loose the lock of hair upon the crown of their heads, indicative of their abandonment of the world, and then rushed sword in hand, through the breach upon the trenches. Great confusion ensued, but it ended in every Rajpút losing his life, and the besiegers dashed into the fort. The dreadful scene which met their view appalled them; the bodies of the women and children were immediately pulled from the wells; but death had done his work; there was an exception however, the Ranee or Princess was still alive, although apparently dying. She had a massive gold bangle upon her ankle. The officer who saw her, in the agitation of the moment, leaving her as he thought safe, went to other wells; but, on his return, found the princess dead; the foot had been removed, and the gold bangle gone. The commanding officer, shocked and highly incensed, offered a reward for the discovery of the perpetrator. The scoundrel's secret was kept and the force broke up. Some time afterwards a force sat down before the fort of Nowanuggur in Kattewar. A battery was opened; a single cannon-shot was fired from the fort as a point of honour before capitulation: that shot killed a European artilleryman in our battery, and another European artilleryman was overheard to mutter to himself—"Served him right for cutting off the Ranee's foot at Chaiya." Was not this retributive justice?

In 1813, the fort of Entouree, in Bhagilkind, was stormed by a detachment under Lieutenant-Colonel Adams, and the garrison made a most desperate resistance. An officer present said, "the garrison consisted of 150 men; they fought in the breach for an hour and a quarter like tigers. When the place was nearly carried the enemy set fire to it in several places, making the whole a sheet of fire; they still kept fighting in the midst of flames, till the chief blew himself up. This was a hard day's work, we were under arms, marching, breaching, and storming upwards of twenty hours, not many of the garrison escaped; a few of the wounded survived, and shewed us the remains of their chief, who died for the point of honour." Sensitiveness with regard to ridicule has occasionally fatal consequences. In my own regiment a sepoy blew out his brains because his wife in a quarrel publicly applied epithets to him which exposed

him to be mocked. At another time, on the line of march in 1818, the men, from want of carriage, being compelled to carry their heavy knapsacks, a Rajpút sepoy of my regiment, indignant at what he called being made a beast of burthen, quietly loaded his musket and shot himself.

I now approach another trait :

SELF-SACRIFICE AND FIDELITY.

Orme in his narrative of the celebrated defence of Arcot¹, in 1751, by Captain Clive, mentions two anecdotes honourable to the native character. In one of the assaults of the enemy upon the forts in which they failed, their commander fell in the *fausse-braye* of the northern breach. He had distinguished himself with great bravery in the attack, and was so much beloved by his troops that one of them crossed the ditch and carried off his body, exposing himself during the attempt to the fire of forty muskets, from which he had the good fortune to escape.

The other anecdote is of touching interest. The siege had continued fifty days; the sufferings and privations of the small garrison, European and Native, had been frightful. Orme says : " I have it in my power, from authority I cannot doubt, to add to the account of this celebrated siege, an anecdote singularly illustrative of the character of the native troops of India. When provisions became so scarce that there was a fear that famine might compel them to surrender, the sepoys proposed to Clive to limit them to the water (*kanjee*) in which the rice was boiled, 'It is,' they said, 'sufficient for our support—the Europeans require the grain.' "

Occasional instances of a singular fraternization of native with European regiments, militating against the caste exclusiveness of the sepoys, brighten the pages of Indian military history. At Jellalabad, under the gallant Sale, when the garrison was besieged and in a state of starvation, sallies were made to capture sheep grazing on the neighbouring hills. A portion of the products of these forays was always allotted to the sepoys, but they, with laudable self-sacrifice, said "animal food is not absolutely necessary for our sustenance, with our habits of life, but animal food is absolutely necessary for the Europeans; we beg therefore you will give the share of the sheep allotted to us to the Europeans," Her Majesty's 13th Light Infantry and the Artillery; and this was done by the Bengal Regiment, the 35th. Afterwards, when Her Majesty's 13th passed the station

¹ Orme, vol. i, pp. 183–196.

where the 35th was cantoned in the North-Western Provinces, the latter gave the Europeans a grand entertainment. The 35th was not amongst the late mutinous regiments, but was disarmed.

In 1785, a large portion of the Bengal army had their fidelity and duty as soldiers put to the severest test during the revolt of Cheyt Sing, suffering from arrears of pay, and want of provisions; for such was the loss of credit of the Government at that time that, as stated by Mr. Hastings, no money could be raised, and the sepoy were being employed against their connexions and friends in the heart of their own country; nevertheless they remained true to their salt. The troops so tried were the 1st and 2nd Battalions, 6th and 7th Regiments, the 19th, the 30th, and the 35th Regiments.

At the close of 1782, the 4th, 15th, 17th, and 35th Regiments, which were at Barrackpore, were ordered for foreign service; they declined to go by sea, and the Government had no power to compel them. They were civil to their officers, and duty was carried on as usual, and no attempt was made to release some native officers and ringleaders, confined in the respective quarter-guards. After some weeks two subadars of the 15th, and one or two sepoy, were tried by court-martial and sentenced to death, and were blown away from guns in the presence of all the regiments that had mutinied, and one other regiment. These regiments were pardoned in General Orders, and went with Goddard to Bombay, and did not return until 1784, and were then amalgamated with other regiments on a reduction taking place; they had not taken the lives of their officers, and had submitted to the necessary punishment for mutiny, because their animosity had not been raised upon a religious matter.

When on the capture of Bednore, General Matthews and his whole force surrendered to Tippoo Sultan, every inducement was offered to tempt the sepoy to enter the Sultan's service, but in vain. During the march they were carefully separated from the European prisoners at each place of encampment, by a tank or other obstacle, supposed to be insurmountable. It did not prove so, however, for one of the captive officers subsequently declared, that not a single night elapsed but some of the sepoy contrived to elude the vigilance of the guards by swimming the tanks, frequently some miles in circumference, or eluding the sentries, bringing with them such small sums as they could save from the pittance allowed by the Sultan for their own support, in return for hard daily labour, to eke out the scanty food of the Europeans. "We can live upon any thing," they said, "but you require mutton and beef¹."

¹ Sir J. Malcolm's Government of India, page 210.

Malcolm relates an analogous anecdote of the sepoy's when he was serving in the Deccan. The Nizam's troops had plundered a village and left the inhabitants to starve : Malcolm's regiment had to send a guard to the village, which was relieved daily, and the men of the guard made a collection of as much rice as they and their confederates could spare, which they took to the starving villagers for distribution.—*Life by Kay*, vol. i, page 22.

In 1803, after the battle of Laswarrie, such was the amount of wounded and sick, that the hospital establishment was insufficient, and the sepoy's were asked themselves to carry their wounded and sick comrades, which they did cheerfully on the line of march.

In 1804, in Monson's disastrous retreat, Holkar left no means or offers untried through the medium of intrigue, to induce the sepoy's to swerve from their allegiance and fidelity; and notwithstanding their dreadful sufferings and the threats of vengeance, and the knowledge that those who fell into Holkar's hands and refused to serve, had their noses and right hands cut off, there were few desertions. A surgeon and some European artillerymen, who fell into Holkar's hands, had their brains knocked out by wooden mallets in his presence.

The regiment I had the good fortune to command at the battle of Kirkee in November, 1817, was attempted to be tampered with by the Peshwa's agents offering large sums of money. The overtures were immediately communicated to me, and under instructions from Major Ford, the Brigadier, and Mr. Elphinstone, my informant, a native officer, and two or three sepoy's were directed to dissemble and carry on a communication with the enemy, by which we were not only able to seize the parties but obtain valuable information. The regiment was chiefly composed of Oude Brahmans and Rajpûts, and good class Mussulmans and some Mahrattas.

The following is a copy of a letter from a friend :—

"Kandesh, February, 1858.

"I arrived in Bombay the beginning of September, and my regiment returned from Persia the end of that month. Rumours affecting its loyalty preceded it, but I am happy to say it has proved itself, by courage and good conduct, the excellent regiment it has always been. The late Sir Henry Havelock, and there could not be a superior judge, admired the 26th Bombay Infantry highly, and gave them no end of praise. The Europeans of Her Majesty's 78th fraternized with the men of the 26th, and used to call them the black Cameronians. Almost immediately on arrival in Bombay, the regiment was ordered

on field service against the Bheels who had risen in insurrection in the Deccan and Kandesh. From the nature of the country, which is hilly, thick with jungle, and intersected with ravines, it is very difficult to get up with the Bheels; but on each occasion they have been severely handled and the bands dispersed. The 26th exhibited the most lively interest in the safety of their officers; one, a Brahman, even tried to screen me with his person when the balls were flying past; and on another occasion a Mahratta sepoy *observing one of the enemy taking deliberate aim at his captain, stepped in front of him and received the shot in his own body.* I am happy to say that a vacancy which occurred at the time enabled me to promote the man at once. The excellent feeling exhibited by the men towards their European officers was not confined to individuals, but was shared in by the whole body, and the abuse levelled at the sepoys by the Bheels for not deserting us was unbounded."

Several regiments of the Bombay army, both cavalry and infantry, have done, and are now doing, good service against the mutineers.

Extract from a letter:—

"It may interest you to know that my son left Umritsir on 18th September, 1857, desiring his servants to follow him, but, in consequence of the rapidity of his movements, they never overtook him, and after wandering about from September till June, they appeared in Delhi, and delivered up, safe, his horse, baggage, and books to his brother. My son had got compensation for his supposed loss, but on hearing that his things were all preserved, the money was repaid.

"Colonel Sykes."

Instances therefore are not wanting of fidelity.

PERSONAL ATTACHMENT.

Colonel Goddard's force, on the second day's march from Calpee, on the 12th June, 1778, lost Captain James Crawford, who commanded the 4th Battalion. He was considered by the men as a rigid, and perhaps severe, disciplinarian; yet he so happily blended with the strictest principles of military discipline and arrangement the practice of the most inflexible integrity and impartial justice in the exercise of his authority, combined with considerate indulgence in regard to the religious habits, the customs, and prejudices of his men, that it may be with truth affirmed, he had the good fortune to verify what ought to be the emulation and object of every military man, with

regard to those under his command, the enviable distinction of commanding their lives through the medium of their affections.

The force was detained for some days, owing to bad weather and waiting for stores from Cawnpoor. The men went from time to time to Crawford's grave to render their tribute of grateful attachment and affection by making their obeisance after the manner of their country ; and on the day the force was ordered to march, the grateful and sorrowing 4th Battalion, or Crawford's as it was called, after it had been told off preparatory to the march, requested leave to pile arms and to be permitted collectively to go and express their last benedictory farewell over the remains of their respected commander, protector, and friend¹.

Sir John Malcolm says that the discipline and subordination of the sepoy's depended upon the personal influence of their commanding officer, upon confidence in his skill, and affection for his person ; this influence could even surmount caste prejudices. Embarkation by sea for foreign service has on more than one occasion caused a mutiny ; but a remarkable instance of the power of personal influence is mentioned by Sir John Malcolm in the case of Lieutenant-Colonel James Oram, who commanded a battalion of the 22nd Madras Infantry. In 1797, he proposed to his regiment upon parade to volunteer for an expedition then preparing for Manilla ; " Will he go with us ? " was the question which went through the ranks ; " Yes ! " " Will he stay with us ? " " Yes ! " and the whole corps exclaimed " To Europe, to Europe ! " They were ready to follow Colonel Oram anywhere, to the shores of the Atlantic as cheerfully as to an island of the Eastern Ocean. Now mark what follows. Such was the contagion of their enthusiasm, that several sepoy's who were missing from one of the battalions in garrison at Madras, were found to have deserted to join the expedition. It would have been happy, when on two occasions fire was opened on regiments at Barrackpore for disobeying orders to embark, that the commanding officers had been the counterpart of James Oram.

Major F. W. Follett, in command of the 25th Bombay Native Infantry, while the regiment was on its march from Ahmednugger to Asseerghur, was taken ill during the night of the 20th July, 1857, in the encampment on the Poorna River. At 1 A.M. when the drums beat to strike the tents, he told Major Robertson, who shared his tent with him, that he had been ill, with cholera symptoms, and during the march he was obliged to be carried in a dooly. He died at 9½ P.M. the same day at the next encamping ground. Major Robert-

¹ Williams' Bengal Army, page 251.

on had the body carried on the next march to Antoorlee, where it was buried. Major Follett was a strict disciplinarian, but a just man, and the men must have equally loved and respected him; for Brahman and Rajpút sepoy, contrary to their prejudice and caste exclusiveness, took the body out of the dooly, let it down into the grave, descended into the grave, laid out the body, and then filled in the earth, though by doing so they became polluted, and had to perform certain religious ceremonies for their purification. Some of the European officers in the afternoon were collecting stones to pile upon the grave, when the sepoy, seeing them so engaged, rushed out of their tents and speedily completed a tumulus over the grave¹. Considering that fully one-half of the men of the 25th Regiment consisted of the same class as the Bengal mutineers, it is assuring to find that a fanatic religious resentment not only has its limits, but that its spread may be arrested by European personal influence, even at the present day.

On the 12th February, 1850, some non-commissioned officers and sepoy sacrificed their lives near Kohat, to recover the body of their young officer, Ensign Sitwell, who had fallen gloriously while charging the enemy.

GRATITUDE.

When I was employed as Statistical Reporter to the Government of Bombay, my duties usually kept me in the districts, leading a camp life for eight months of the year. In March, 1830, two poor ryot cultivators were brought to my little camp who had been dangerously bitten and lacerated by a panther in driving the animal off from an attack upon their flocks. I did my best for the poor people, dressing their wounds daily and letting them remain with me until their wounds were healed. In the end of April I dismissed them to their village in the Júnir pergunnah, not expecting to see or hear more of them. Towards the end of May I moved towards Poona for Monsoon quarters, and, on the march, one day, was surprised to recognize, standing by the road side, the two ryots whose wounds had been healed. They had heard of my movements, and had crossed the country from their village, ten miles distant, to offer to me pots of honey and fresh

¹ The regimental order issued by Major Robertson on the occasion of the death, contained the following passage: "In these troublous times, when the behaviour of a great portion of the Bengal Army has rendered it infamous, it could not but have been gratifying to the British officers, present at the funeral, to witness the manifest grief with which the highest caste Brahmans and others of the regiment, crowded to assist in placing the body of their late commander in the grave."

butter and milk, spontaneous offerings in testimony of their gratitude for the service I had rendered them.

HUMANITY.

It is gladdening to have an instance of humanity in the horrors of the mutiny.

When the mutiny broke out at Gwalior amongst Scindia's Contingent, the Adjutant of a regiment, Lieutenant ———, hastily mounted his horse and galloped down to the parade; he was received with a volley of musketry, his horse shot, and, in extricating himself from the stirrups, one of his boots was drawn off, four sepoy's rushed upon him, pinioned him, and conveying him out of the cantonment, took him across the river, and giving him a blanket, told him to save his life and make the best of his way to Agra. He had left his wife sick in bed, and he told the sepoy's that nothing on earth would induce him to go without her, and that he must go back; the men remonstrated, but without effect, and said his life must be sacrificed. At last, two of the sepoy's said they would go and bring his wife; after some time they reappeared, helping along the poor creature, who was very feeble. On joining her husband, there were not any means of getting her on further, and Lieutenant ——— begged of the sepoy's to shoot them both; instead of doing so, they made a hammock of the blanket, slung it to one of their muskets, and carried her for some miles, until they were out of reach of the mutineers. The sepoy's then left them, and they ultimately got to a place of safety.

Extract from a letter :—

"I cannot pass away from the late scenes of excitement and death without paying a tribute to the exalted tone of the sepoy's of the 25th Regiment, and this becomes more prominent, considering the troublous times in which we were playing the grand game of hold-fast against such hordes of enemies. During the heat of the battle of the 23rd, the sepoy's of the 25th Regiment suffered considerably. They came into the field-hospital suffering from every description of wounds, arms and legs shattered by round shot, limbs and body perforated by musket-bullets, and flesh wounds of no slight nature. To see these men as they sat or lay down in the burning sun enduring all the excruciating agonies their wounds had caused them, while the surgeons were busy with others who had preceded them, was truly noble. The general observation made by them was 'Ah! well, never mind, we have eaten the Sircar's salt for many years, this has been good work, and the Sircar will be good

and take care of us, or our families if we die.' One poor fellow, whose blood was issuing profusely from a wound near the shoulder-joint, was offered a little brandy-and-water as a stimulant, when he nobly said, 'Give it to my brother first,' who sat next to him groaning in agony. He then drank, and said 'he did not mind his wound, for he knew Government would not forget him.' Not a man refused to take what was offered to him as drink, even the all-shunned wine was willingly accepted by them; and when an amputation was performed, they bore it with heroic fortitude, for although chloroform was not administered, scarcely a groan escaped, while the dreadful knife was severing the member from the body. In action they were cool, gallant, and intrepid; under the painful ordeal of the surgical operation they displayed patience, cheerfulness and fortitude.¹"

As a sequel to the cases of military self-sacrifice, and as an instance in civil life of indifference to consequences and also of domestic attachment, Mr. Holt Mackenzie mentioned to me the case of a brother sentenced to a comparatively slight punishment, for being accessory to a fray attended with homicide, who, by a pious fraud, endeavoured to get himself hanged, and very nearly succeeded, in the room of an elder brother, who had been condemned to death, the one having a family, the other none. Such a case, Mr. Mackenzie says, is not probably to be found in our Newgate Calendar.

CHARITABLE SENTIMENT.

There is no Poor Law in India, and there never has been one: it has never been obligatory to feed the hungry and clothe the naked; poor and destitute there must be amongst 200,000,000 of souls, even in the most fruitful land and the most prosperous state of society. How much more so, then, amidst the famines, pestilences, and devastations of ceaseless war to which India has been subjected. The question has its solution in the universal sentiment of charity which is inculcated both by precept and example in all grades of society. From the institution of Buddhism, six centuries before Christ, down to the present day, all members of the ecclesiastical body, wherever Buddhists exist, are obliged, with a small basin in their hands, to solicit their daily meal of food, begging from door to door, as the mendicant friars of Italy and Spain do to this day. Beggars in India are not so subject to severe rebuffs as in Europe; they rarely appeal in vain for alms, indeed, they ask with confidence, if not with insolence, knowing

¹ Extract from a letter from an officer after the battle near Mundesore in Rapútana, fought 23rd November, 1858.

the devotional sentiment which inculcates the gift of alms in expiation of sin. The celebrated Alla Bacc carried her feeling on the subject, according to Sir John Malcolm, to such lengths, that she not only had alms dispensed daily in several parts of the Holkar territories, but she had water-stations by the road side for thirsty travellers, and serais or resting places for them; and her benevolence extended even to the birds of the air, in providing fields of grain to be left standing for the flocks which the farmer chased from his own holdings. This consideration for animal life is not confined to the feathered tribes, for all who have been in India must have witnessed the Nandi or free bull, commonly called the Brahmany bull, perambulating the streets of towns, being allowed to thrust his muzzle into the grain baskets of the dealers, almost unresistingly, and when driven off, rather by vociferous menaces than by blows.

A Parsee of Bombay, Sir Jamsetjee Jeejeebhoy, Bart., has established a world-wide fame from having spent more than a quarter of a million of money from his private fortune, in founding hospitals, dispensaries, supplies of water, poor asylums, marriage dowries, schools, &c.; in short there has not been a work for the public benefit in his time to which he has not, in Western India, been a contributor with a lavish hand,—as an instance, in 1846, with a dash of his pen, he subscribed 50,000 rupees to the Bombay District Benevolent Society. But this charitable sentiment is not confined to enthusiasts here and there, nor to certain localities, for there are few districts in India, where works for the public benefit are not annually, nay monthly and weekly, executed from private means. While in office, at the India House, I kept a diary, and from that I will give a few illustrative cases taken at random; the cases having been officially communicated to the Court of Directors by the several Governments of India.

In Saugor, Jubbulpoor, forty-four wells for public use were constructed at the private expense of individuals in 1846, at a total cost of 7,476 rupees; some wells costing 500 rupees each.

In despatch of 1st March, 1849, it is reported that in Jaloun, the people of the town of Morley subscribed 8,966 rupees for a tank, Government adding 3,295 rupees.

In reply to Madras despatch, 9th September, 1843, it is recorded that the Deputy Sheristadar of Tinnevely gives 100 rupees monthly, to have an English schoolmaster for the school at Tinnevely.

In Bengal judicial despatch of 21st September, 1841, a native lady gives 10,000 rupees for the restoration of a road from Berhampoor to Darjeling.

In North-West Provinces despatch of July, 1844, Pundit Ramswamy obtains permission to buy plots of land between the Nerbuddah and the Himalayas to build Durumsalas for travellers.

In Madras revenue despatch of January, 1846, it is recorded that Appaswaney Naik, of Tinnevely, built two Choultries for travellers, one for Brahmans and Hindús, and the other for Europeans, at a cost of 20,000 rupees and *endowed* them.

In Bombay political despatch of February, 1846, the Rao of Cutch subscribes 4,000 rupees per annum, to a marriage portion fund, to a similar sum given by the British Government for the daughters of the poorer Jahrejah Rajpoots in Cutch, to prevent female infanticide.

In India political despatch, 1847, Rajah Sutee Churn Gosa presents 10,000 rupees to the Fever Hospital at Calcutta.

In a Punjab despatch of 1854, I found that some of the charitable institutions dated 600 years back.

In India public despatch answered 7th July, 1846, Set Churn Ghosal presents 5,000 rupees for founding a scholarship in the Benares College. In the same despatch the schools and college at Lahore, in Bopal, are said to be supported by the native gentry. A very curious case occurs (India political despatch) in reply to 2nd June, 1846, of a subscription to pay off a State debt in the principality of Jyepoor. *The Council of Regency give up their stipends, 70,000 rupees per annum until the debt be paid, and the Ranees give up villages to the value of 105,000 rupees per annum for the same purpose!* The Thackoors and Bankers also subscribe for the supply of water to Jyepoor. It would be a novel feature to have our Cabinet Ministers sacrificing their salaries on the altar of their country.

In Bengal judicial despatch, in reply to one of the 10th February, 1847, Baboo Kali Persaud, of Jessore, offers 9,000 rupees, or 400*l.*, annually, to expedite a public work.

In India public despatch, 2nd December, 1846, Raja Sait Chund Ghosaul and his family, of Benares, give 1,15,300 rupees (11,530*l.*) for educational and charitable purposes to Government.

In Bombay public despatch, in reply to last half of 1845, 24th September, 1847, the inhabitants of Mahar, in the Tannah Collectorate, contributed 2,000 rupees towards the clearing out a tank.

In Madras public despatch, in reply to letter 1846, Secloo Chenum Moodelaer erects a bridge at his own expense over the river Tambrapoorney.

In India public despatch, in reply to second half of 1846, 22nd November, 1847, Baboo Kali Persad, of Jessore, constructed various

works of public utility at his own expense, for which an honorary distinction was conferred upon him of a dress, with the title of Roy.

In India judicial despatch, October, 1845, seventeen private individuals, in the year 1842, in the Delhi Division, lay out 9,870 rupees in wells, travellers' bungalows, and tanks for the use of the public. In Meerut, four persons give 8,500 rupees; in Kumaon, three persons 3,400 rupees; Agra, four persons 4,000 rupees; Allahabad, 15 works cost 6,626 rupees; Benares, bridges, wells, tanks (51 works), cost 22,994 rupees;—all at private expense.

In the Patna Division alone, in 1854, the public works executed by private individuals cost 77,134 rupees; in 1855, 68,402 rupees; and in Arracan, 28,712 rupees.

In Bhaugulpoor, Nuddia, Cuttack, Assam, in short in ten provinces of Bengal, hundreds of instances of individuals are recorded who have contributed from their private means for works of public utility.

Sir Jamsetjee has his rival in benevolence in Bombay, for in October, 1857, David Jessoon, a native Jew, gave 30,000 rupees and a house to found an Industrial Institution.

I could multiply these instances a hundred fold, nay a thousand fold, for they are of weekly occurrence all over India, establishing traits of Indian character which put it on a level with Western European nations for public spirit and charitable sentiment.

PROVISION FOR PARENTS AND RELATIVES.

In 1796-7, a force was sent to Hyderabad from Bengal, and the men made extensive arrangements for leaving part of their pay with their wives and families; but Captain Williams says:—"It is further due to their exemplary character and conduct to state, that it is not to their wives and children only that they make such appropriation of a large part of their income; in regard to them it can only be viewed as conforming to an indispensable obligation. But a large portion of the men who have no such ties, voluntarily and cheerfully contribute to the support of their aged parents, or other needy relations. Nay, Government has been obliged to interpose its authority for restricting the portion of pay which the men might assign to their families whilst on foreign service, in order to obviate the want and inconvenience to which they were otherwise liable to expose themselves in those situations. This practice continues in full activity to the present day with the three native armies of India.

CEREMONIAL.

I should exhaust your time before I could exhaust my "Traits of Indian Character;" I will therefore conclude with a few words on ceremonial, and a droll anecdote.

Sir John Malcolm says:—"The Indians are, perhaps, the most ceremonious of all nations, and the rules of decorum are seldom infringed but when insult is intended. In visiting," Sir John says, "it is quite contrary to etiquette to converse on business on a first visit, and when they are merely those of ceremony certain subjects should be scrupulously avoided. No allusions to the females of the family, to matters of caste, and peculiar habits, should by any means be introduced; remarks on dress or on the good looks of any relative, present or absent, are rude; and to praise any jewels, horses, elephants, or equipage, in the presence of the owner, renders it incumbent upon him as a point of good breeding, instantly to prevent it; at the same time it is always understood that an equivalent in some other equally valuable or more precious article will be given in return. The Indians have a great dread of an envious eye which they think liable to bring calamity on the object; so that if a child or a horse be especially admired, it is apprehended some harm will happen to it."

Most of us know the liberality with which we bestow the contemptuous epithet of black fellow upon the natives.

General Briggs relates a remarkable anecdote of the caustic sarcasm with which Jamsetjee, the celebrated Bombay Parsee ship-builder of the dock yard, who had risen from the grade of a common ship carpenter to be master builder, acknowledged the epithet. He had completed, entirely by native labour, a frigate for the royal navy; she was ready for the launch, to which the governor, staff and naval officers were invited. During the preparations Jamsetjee walked round the vessel, viewing her with evident pride and complacency. He then went on board, and having gone quietly into the hold, he caused to be engraved upon the keelson:—"This ship was built by a damned black fellow, A.D. 1800." He said nothing about it at the time, but some years afterwards when the ship came into dock, he pointed out the inscription, and the reproof it involved.

CONCLUSION.

I could necessarily give multitudinous traits of hypocrisy, untruthfulness, servility, avarice, ingratitude, corruption, immorality, treachery, infanticide, murder, and robbery; fully counterbalancing,

if not neutralizing or outweighing all the praiseworthy traits of Indian character which I have enumerated; but my desire is, considering the lamentable occurrences since May, 1857, and which have necessarily exasperated the feelings of Englishmen against the people of India generally for the crimes of a portion of them only, and which crimes have obliterated from the mind, or cast into the shade those admirable qualities which have often been exhibited, and which, undoubtedly still exist, though latent,—I repeat that my desire and hope is, that by recalling to memory some of the bright features of the past, our kindlier feelings may be revived, our distrust gradually relaxed, and our hope for the future strengthened.

Sir John Malcolm says:—"I consider, and the opinion is the result of both experience and reflection, that all danger to our power in India is slight in comparison with that which is likely to ensue from our too zealous efforts to change the condition of its inhabitants, with whom we are as yet but imperfectly acquainted. A person who entertains such sentiments as I do upon this question must appear the advocate of very slow reform; but if I am so, it is from a full conviction that anything like precipitation in our endeavours at improvement is likely to terminate in casting back those we desire to advance; on the contrary, if, instead of over marching, we are content to go along with this immense population, and to be in good temper with their prejudices, their religion, and usages, we may gradually win them to better ways of thinking and of acting. The latter process, no doubt, must be one of great time, but its success will be retarded by every hasty step."—*Sir John Malcolm's Instructions to his Assistants.*

The wisdom of these opinions cannot be too earnestly impressed upon our rulers of the present day. We have been taught a bloody and fatal lesson by losing sight of them; may we profit by the past, and may the commonsense view be taken for the future, that the rule of a handful of Europeans over the millions of India can only be permanently maintained, not by any amount of physical force that England could exhibit, but by winning the respect and good-will of the people.

APPENDIX.

CHARACTER OF THE HINDUS BY WARREN HASTINGS.

Great pains have been taken to inculcate into the public mind the opinion that the native Indians are in a state of complete moral turpitude, and live in the constant and unrestrained commission of every vice and crime that can disgrace human nature. I affirm by the oath that I have taken, that this description of them is untrue and wholly unfounded. In speaking of the people it is necessary to distinguish the Hindus, who form the great portion of the population from the Mahomedans, who are intermixed with them, but generally live in separate communities; the former are gentle, benevolent, more susceptible of gratitude for kindness shewn to them, than provoked to vengeance by wrongs inflicted, and as exempt from the worst propensities of human passion as any people on the face of the earth; they are faithful and affectionate in service, and submissive to legal authority; they are superstitious it is true, but they do not think it ill of us for not thinking as they do. Gross as their modes of worship are, the precepts of their religion are wonderfully fitted to promote the best ends of society,—its peace and good order.—*Evidence before the House of Commons.*

CHARACTER OF THE BENGAL SEPOYS.

The Bengal Native Infantry have been long noticed for their good conduct and gallantry in the field, and some of the battalions have upon all occasions distinguished themselves in a particular manner.

Before 1757, there were only one company of European Artillery, four or five companies European Infantry, with a few hundred natives, armed after the manner of the country,

The foundation of the Bengal Infantry was laid in the companies of the Madras Sepoys, who went with Clive and Major Kilpatrick from Madras in 1757.

Each battalion had one captain, one ensign, a serjeant-major, and a few serjeants, and a native commandant, about 900 of all ranks.

In 1764, there were eighteen regiments, and they ranked according to the date of their respective Captain's Commission: two celebrated names, Goddard and Dow were the youngest of the captains.

In 1773, each regiment had three lieutenants and three ensigns,

and the tom-toms were taken away and drums and fifes given; from this period the European officers were gradually increased in number until their present strength was attained.

The sepoy frequently gave their aid in putting down the mutiny of their comrades.

The 2nd battalion, under Captain Bradley, disarmed the 15th battalion in mutiny at Midnapore in 1795.

While the 10th Regiment, in 1772, was on parade, a sepoy shot Captain Ewens, the regiment broke and rushed upon the murderer, but Captain Carnac ordered them to fall in again, ordered down his own battalion 24th, had a drum-head court-martial; the murderer was sentenced to be drawn asunder by ponies; but these failing, the sepoy were allowed to put him to death with their swords.

General Clavering, in 1775-6, expressed his wonder at the discipline of the sepoy regiments, and that he found them in no respect inferior to any regiment in the King's service (page 182)¹

1778.—Six battalions marched across India to Guzarat.

The 15th Battalion (Matthews) encountered the French before Masulipatan in 1758, and in 1759 it attacked, defeated, and took prisoners the Dutch troops smuggled into Bengal by the Nawab Meer Jaffier.

In 1763, in the battle of Gheria, near Sooty, where the European regiment was broken by a sudden attack of the enemy's cavalry, the 15th, with the Royal 84th attacked the enemy, and gained a complete victory.

In 1764, the whole army, Europeans, chiefly French and Germans, and natives, when employed against Sujah Dowlah, mutinied, and marched to join him, unless a long-promised donation was paid. The sepoy, by the persuasion of their officers, whom they highly respected, came back to camp.

In 1784, the 15th, then the 4th, was disbanded for mutiny.

In 1781, the 19th was disbanded, the men mutinying, owing to the misconduct of Major Grant about booty, and he was cashiered.

In 1795, the 24th refused to embark for Malacca; were fired upon by Major-General C. Erskine, and dispersed.

1810.—Five battalions of volunteers went to Java, and their conduct was described as "having by their steadiness and gallantry in action, and by their discipline and good conduct in all situations, excited general admiration and esteem."

While in Java they were frequently opposed to European troops. One regiment returned in 1815, but the others, contrary to the expect-

¹ Williams' Bengal Army.

tations held out to them, were detained from their homes and families for nearly five years.

1815.—In the Nepaul war, the Bengal sepoy is thus spoken of:—"We cannot sufficiently admire the Bengal sepoy; such gallantry, submission, temperance, and fidelity, were perhaps never combined in any soldiers."

The officer who continued Williams's Narrative down to 1815, concludes his labours with the following words—"The writer of this brief continuation cannot take leave of the subject without many pangs of regret, heightened by the apprehension that it may never again be his good fortune to serve with troops, who are endeared to him by a companionship of service and professional exertions during a period of more than thirty years, to whom he is proud to offer the tribute of his grateful attachment and affection; and of whom he can conscientiously declare his conviction, adopting the words of Mr. Hastings, 'under the most solemn appeal of religion,' that with treatment of the most simple and practicable tenor, the characteristic qualities of gratitude, attachment, fidelity, cheerful obedience and respectful deportment of the native soldiers of Bengal, must ever reflect lustre on their moral and military virtues, and may be justly held forth as a theme of emulation and praise to all mankind. Comrades of my early youth and of the best portion of life, which has been cherished and rewarded, through the medium of your meritorious conduct! Farewell."

General Nott, August 8th, 1842, wrote to General England—"With regard to Europeans, I would just as soon go into action with sepoy," and again he wrote—"The zealous and cheerful manner in which the sepoy has conveyed the battery train during a march of 300 miles of the most difficult country in the world is beyond all praise, and has called forth the admiration of their European officers, and European artillerymen attached to the battery; their patience under fatigue and privations deserve my warmest thanks, and their active and anxious zeal to hasten the march and encounter the enemy, have confirmed me in the conviction, that they are, when they perceive that confidence is placed in them, fully equal to any troops in the world."

Sir Charles Napier, says of them—"Under my command, at various times for ten years, in action and out of action, the Bengal sepoy never failed in zeal, courage, or activity."

A recent instance of marked fidelity occurred in the case of the 1st Bombay Lancer Cavalry, which charged the mutinous brigade of Bengal sepoy with guns at Nusseerabad, in Rajpootana. The regiment was composed chiefly of the same class of men as the Bengal

regiments, and from the same localities in Oude, and it is possible they may have operated hostilely against relatives and friends; the regiment, therefore, deserves the more credit for its conduct under such trying circumstances. The following are the official details relating to the event:

“The Right Honourable the Governor in Council has the highest satisfaction in publishing, for the information of the army, the annexed report of the conduct of the 1st Regiment of Light Cavalry (Lancers), made by Captain Hardy on the occasion of a mutiny of the Bengal troops at the station of Nussereabad on the 28th of May last.

“This report has only recently been laid before Government by his Excellency the Commander-in-Chief, the original despatch having miscarried on the road.

“By a later report, the Governor in Council has learnt with regret that eleven men of the Lancers basely deserted their comrades and their standards, and joined the mutineers; but the Governor in Council will not suffer the disgrace of these unworthy members of the corps to sully the display of loyalty, discipline, and gallantry which the conduct of this fine regiment has eminently exhibited.

“To mark the approbation with which he has received this report, the Right Honourable the Governor in Council will direct the immediate promotion to higher grades of such of the native officers and men as his Excellency the Commander-in-Chief may be pleased to name as having most distinguished themselves on this occasion, and thereby earned this special reward; and the Governor will take care that liberal compensation is awarded for the loss of property abandoned in the cantonment and subsequently destroyed, when the Lancers, in obedience to orders, marched out to protect the families of the European officers, leaving their own ungarded in cantonment.

““To the Officiating Major of Brigade, Rajpootana, Field Force.

““Sir,—I have the honour to report, for the information of the Brigadier commanding the Rajpootana Field Force, the part taken by the 1st Lancers, in the late sad proceedings at Nussereabad. At about half-past 3, P.M., on the 28th instant, the alarm was given that the 15th Regiment of Bengal Native Infantry was in open mutiny, and had seized the guns. In common with the other officers, I was almost immediately down in my troop lines. In a few minutes the whole regiment was under arms, mounted, and formed up in open column of troops. The column was put into a gallop, and proceeded to the lines of the artillery, when the guns were immediately opened upon us. The order was given at once to charge and take the guns, troops

charging in succession. Being 'left' in 'front,' the 6th troop, under Captain Spottiswoode, led ; that officer fell at the head of his troop, after getting into the battery. A succession of charges followed; the officers, of course, leading the way. Not succeeding, as hoped for, in retaking the guns, Colonel Penny ordered the attacks to cease, and the regiment was marched back and formed in rear of our men's lines, to protect them and be ready to act on the mutineers if they came out of their lines into the plain. While there, about 5 o'clock, the whole of the 15th officers joined us, having been fired at by their men. The 30th Regiment would not obey their officers, and it was decided to move out of camp with the ladies and children while light remained. Colonel Penny being taken ill, it devolved upon me to execute the order for immediate retreat on Ajmeer. Subsequently the direction was changed for this place (Beawur), where we arrived yesterday morning. Half-way, the regiment halted till daylight for rest, and to let stragglers come up ; and here Colonel Penny was brought a corpse, having died on the road. A volunteer party of three men and a havildar was sent back to reconnoitre and bring an account of the further proceedings of the mutineers in cantonments ; and a party, under a native officer, was left on the halting-ground with orders how to act in case of emergency, and to stay till rejoined by the party reconnoitring.

" ' This near detachment reached the regiment at 8 o'clock yesterday evening. The result of the reconnaissance, which duty was performed in the most creditable manner, has already been laid before the Brigadier in person. In addition to Colonel Penny, deceased, apparently from over exertion, and Captain Spottiswoode, shot, as before stated, under the guns, Cornet Newberry, a promising young officer, was also shot in the act of charging, and Lieutenant and Adjutant F. Lock and myself are wounded, but doing well. At present I only know for certain of one of our men badly wounded, and three horses shot. Cornet Jenkins had his charger shot under him, and Lieutenant Stephens's charger is badly wounded. The loss of the mutineers I have been unable to ascertain at present. I make out to be missing 66 men, exclusive of the guards and sick left behind, but I hope the greater number of these will be speedily accounted for. In concluding this report, I would beg the Brigadier's kind offices in recommending the regiment under my command to the generous consideration of Government. Cantoned with two mutinous regiments, the regiment has, as the Brigadier knows, been nightly on duty for a fortnight past, and entirely responsible for the safety of the cantonment. They have been constantly tempted and assailed with abuse, with no other result

than telling their officers. They turned out in the promptest way to attack the mutineers, and they marched out of camp when ordered, as they stood, leaving their families and everything they had in the world behind them. They are now without tents, in a hot plain, and without any possibility of being comfortable ; but up to this time all has been most cheerfully borne, and all duty correctly performed. I am fearful as to the propriety of mentioning the losses of the European officers, but I cannot refrain from bringing to the notice of my superiors the grateful sense I have of the efficient and kind aid that the officers have afforded me at this trying time. Their active services during the mutiny have already been recognized by the Brigadier's approbation.

“ ‘ I have the honour to be, &c.,

“ ‘ E. A. HARDY,

“ ‘ Commanding 1st Lancers.

“ ‘ Camp, near Beawur, May 30.’

“ The Commander-in-Chief is pleased to direct that the G. O. No. 627, of the 1st of July, with the letter from Captain Hardy thereto subjoined, shall be carefully translated into Hindustani and Mahratta by interpreters of regiments, and read and explained to the whole of the native troops of the Bombay army, at a special parade to be ordered for that purpose.”

REARMING A NATIVE REGIMENT.

The following address was delivered at Jullunder, on Monday, the 17th January, 1859, to the 33rd Regiment Native Infantry, on the occasion of their being re-armed. Major Lake delivered the address in very good language, on behalf of Brigadier Milman, who could not, of course, do it himself, having only just arrived from England, and not yet “ passed in the vernacular.” The address is manly and straightforward.—

“ Native Officers and Sepoys of the 33rd!—On the part of Brigadier Milman, I congratulate you and your Colonel that the day has come in which the Government has recognized your fidelity and devotion. When General Nicholson took away your arms, he promised you that they should be restored if you behaved well. Knowing all that has happened since that day, I can testify that in every respect you have proved true to your salt. I therefore rejoice that the day has come in which General Nicholson's promise has been fulfilled. You should remember at all times how much you have to thank the Government for. What other Government pays its soldiers month by month,

pensions them when they are worn out, and takes care of them when they are sick, as the British Government does for you? You have been from Juggernath to Cabul, and you know as well as I do that no other Government does this for its soldiers. I am glad you have not lost such a service, and that you have not allowed yourselves to be deceived by those who have brought ruin and misery upon Hindostan: I mean those who spread a report that the British Government wished to break caste by giving you greased cartridges. This is utterly false. A man does not become a Christian by handling a greased cartridge. Christianity is not in eating, in drinking, in wearing clothes, or in handling greased cartridges, but it is in the mind. Only he who with his mind acknowledges Christianity, can become a Christian, and he whose mind denies Christianity can never become a Christian. It is quite impossible that by a greased cartridge or by any other artifice attempts should be made to break your caste. A soldier without arms is like a scabbard without a sword; this reproach is now removed, and as medals are given to soldiers in token of bravery, so the restoration of arms will be to you a mark of your fidelity, that you remained loyal when so many others proved traitors. The Brigadier, myself, and all of us, have full confidence that the bravery displayed by this regiment at Bhurtpore, in Cabul, at Ferozeshahur and Subraon, will be always shown against all traitors, and against the enemies of the British Government."

The troops were drawn up in quarter-distance columns. Right Artillery, 1st Irregular Cavalry, Her Majesty's 87th, 33rd, 12th Punjab Infantry, the 33rd formed a hollow square. After the address, the Brigadier inspected the line, and the troops marched past in column. The Artillery and Cavalry afterwards trotted and galloped past, and the re-arming was *un fait accompli*.—*Lahore Chronicle*, February 2.

ART. IX.—*Translation of a Burmese Version of the Niti Kyan, a Code of Ethics in Pali.* By E. FOWLE, Esq.

[Read 20th November, 1858.]

THE work that I am about to read is called the Niti Kyan, signifying "a sacred writing."¹ It is a short code of ethics compiled from selections from various authors, and is one of several that I have translated from the Burmese language, which are themselves translations from the Pali. The present work is taught in the Burmese monasteries to the daily scholars and resident novices. The necessity of learning and the advantages of education are impressed upon the youthful population from an early age, and the consequences of ignorance are contrasted at the same time. It may perhaps be interesting to notice briefly the system of education adopted in Burmah; this is so simple in its practical application that I can explain it in a few words. The clergy receive no pay, and are not connected with the State, but entirely supported by voluntary contributions of food and other necessaries, a small quantity from each meal being set apart for the priests; but this custom is so general, and the portion so freely contributed, that there is generally a surplus of food at the monasteries, sufficient to feed the poor. In return, the poongyees, or priests, educate the whole of the male population without charge or fee of any description, their vocation precluding them from touching money.

The education imparted generally consists of reading, writing, arithmetic, and sacred history. A useful amount of education is therefore generally diffused. A higher standard is less common, but a knowledge of algebra, astronomy, and of the classical Pali, besides the rudiments of the arts and sciences, are also imparted to the extent that they are understood by their religious professors. The fact that almost every man can read and write speaks for itself as regards the working of their system, which is based upon universal or national charity; it is firmly fixed and established among the people, and, as I have before stated, it results in feeding the poor, educating the people, and supporting the clergy.

The same simple system I have no doubt exists also in Japan,

¹ More correctly "A Knowledge of Polity."—Ed.

where, as in Burmah, the Buddhist religion exists in greater purity than in other countries, and may perhaps explain the recent interesting accounts that we have lately received, and be the cause of the prosperous, satisfactory, and contented condition of this singular and extraordinary nation.

The code of ethics which I propose to read to you is in every day use, and is generally known, being one of their elementary books.

The Burmese resemble the Persians in their style of conversation, being remarkably figurative in their manner of expressing themselves, constantly seasoning their conversation with proverbs, metaphors, poetry, and citations from this work, either for attack or defence.

But little of the literature of the Burmese has been translated, and it is therefore almost unknown. It is in a great measure derived from the Pali, but they are far from being deficient in strictly national literature, possessing a written history and poetry of their own, besides works too numerous to mention upon astronomy, botany, law, medicine, statistics, revelations, and also of fiction. Burmah is, comparatively speaking, a new field from which many wild flowers of literature may yet be gathered, sufficient to make a presentable bouquet to the Royal Asiatic Society, and to which I wish to direct the attention of the scholar and student.

NITI KYAN.

I bow with reverence to the three principles of worship—namely, God, his precepts (commandments), and disciples; and, having done so, will expound the *Loga Nee Dee*, a book formed from extracts gathered from various Burmese works on religious law. With respect to this book it deserves among men to be called their Life, Father, Mother, Teacher, Friend: therefore is it that those who have made themselves acquainted with its contents are celebrated for their wisdom and intelligence.

1. A lazy man cannot acquire knowledge.
2. A man without knowledge cannot collect wealth.
3. A man without wealth cannot secure good friends.
4. A man without good friends has no comfort.
5. A man without comfort has no leisure for religious duties.
6. A man who does not attend to his religious duties can never attain to the state of Nibban, or absorption into the Deity.
7. Riches are not equal to learning, for wisdom cannot be stolen or lost; it is therefore thy best friend, and benefits while living and even after death.

8. Gather up each fragment of learning, and think it not small or unworthy of notice, for as rivers are formed and wells are filled by drops of water, so may thy wisdom increase.

9. A knowledge and mastery of the tongue is desirable and good ; equally so is that of the hand, but they can only be perfected by study and application, and in return they will support thee in thy profession or employment.

10. Every mountain does not contain a mine of precious stones.

11. A person without sense is like the fruit of the Sapan tree, fair without, but the inside is filled with insects.

12. A sensible person is like unto a jack fruit, which may be rough without, yet is filled with wholesome food.

13. A woman's wealth is her beauty.

14. A man's wealth, his learning, family, and good name.

15. A snake's wealth, its venom.

16. The wealth of men in power, their position, influence, state, and followers.

17. The wealth of priests, moral precepts.

18. The wealth of Brahmins, their charms and prophecies.

19. A man of good family upholds its honour, and however poor he may become, never disgraces it.

20. The shade of the forest is pleasant.

21. Better than the shade of the forest is the shelter of thy parents or relatives.

22. Better than the shelter of thy parents is that of thy teacher.

23. Better than the shelter of thy teacher is that of thy ruler.

24. But above all, the shelter of thy God is greater.

25. Soft words make many friends.

26. Bitter words make many enemies. As the sun from its heat cannot be approached, and appears alone, so is he who speaketh bitterly ; but, on the other hand, the man who speaketh fairly is as the cool moon, surrounded by the stars and planets which keep her company, so are his friends.

27. A brave man is impatient for the battle.

28. A lawyer is fond of argument.

29. One wishes for a friend when one gets a rare or dainty dish.

30. A scholar wishes for difficult passages for the pleasure of interpreting them.

31. The ignorant are like dogs that snap and bite at each other ; when they meet with a wise man they snarl and snap at him, fearing his power.

32. He who takes his ease is liable to disease.

33. Every elephant is not an Albino (white elephant).
34. Every scented tree is not a santagoo tree.
35. Every town does not contain a philosopher.
36. If a harper does not practice for five days he loses proficiency ;
37. An archer neglecting practice in seven days fails in his aim ;
38. And a woman separated from her husband for thirty days endangers her chastity.
39. The man who eats and sleeps much, although he increases in fatness, increases in vice.
40. The beauty of women and the sweetness of the sugar-cane bring satiety ; but with the words of wisdom you can never be filled.
41. Learning, to be permanent, must be taught by degrees.
42. Those who seek for riches must do so by degrees.
43. Those who go a-courting, must not be in a hurry.
44. Those who ascend a mountain must walk slowly. Answer angry people gently and slowly. These five things are to be done gently and slowly.
45. Give thanks and praise to soldiers when they return victorious from the battle.
46. Be grateful and pleased when your grain is stored in your granary.
47. Be thankful for the feast when you have partaken of it.
48. Be grateful to your wife in old age.
49. A man who continually asks favours is not liked.
50. A man who never confers favours should not be liked.
51. Those who have wealth in riches and learning should take care of them.
52. Those who never accumulate riches or succeed in life are drunkards, gamblers, spendthrifts, dissipated characters, and their associates.
53. The avarice of governors for riches, philosophers for learning, and the love of those we cherish, is as insatiable as the sea, which receives into its bosom all the rivers and waters of the world, but is never filled.
54. A person may have youth, beauty, rank, wealth ; but without learning, he is like a handsome flower that has no fragrance.
55. A person, although his parents may be poor, foolish, and of humble origin, may yet become prime minister ; therefore in talking never allude to a man's family.
56. A person who studies many things at the same time without perfecting himself in any particular thing, remembers that which he

has imperfectly learned only as a dream, of which he has but a faint recollection.

57. The master beats his pupil as a potter batters his clay, not to break it or destroy it, but to bring it into shape.

58. A rose imparted its fragrance to a leaf in which it was folded : so associate thyself with wise men, and their wisdom will cling to thee.

59. Associate with the virtuous, and when you have learned their law you can come to no harm. Mix not with the wicked, put them aside, but cling to the virtuous. Do good at all times, whether by night or by day ; and reflect within thyself of the uncertainty of human existence.

60. There is no friend like good sense.

61. Gifts give great pleasure to the recipients.

62. A good kind of flower, though withered, still retains some of its fragrance.

63. A fighting elephant does not fear the battle.

64. You may break or crush a sugar-cane as much as you please, but it will still retain its sweetness.

65. However great may be the misfortunes of the virtuous man, he will never transgress by breaking the law, or acting improperly in any way.

66. However hungry the lion, he will not feed on vegetables, or touch the flesh of his friend the elephant.

67. The perfume of flowers is refreshing, more refreshing is light of the cool moon, but most refreshing are the words of wisdom.

68. The sun may rise in the west, the Mycen Moh mountain may be bent as a bow, the infernal fires quenched, and the lotus grow on the mountain's top ; but the words of truth and wisdom are unchangeable.

69. The bee loves flowers, flies putrified flesh ; the wicked quarrel, but the wise and virtuous love good deeds.

70. However deep the well, it cannot contain as much water as the river.

71. There is nothing that can shine like the sun.

72. However much your friends and others may like you, it is nothing compared with a mother's love.

73. A woman is the best and sweetest of blessings.

74. Wonderful things are believed when seen.

75. A wicked mother brings up her son to speak improperly, and a wicked father teaches him to act improperly, and if both parents are wicked the son both speaks and acts improperly.

76. A good mother teaches her son to speak fairly, and a good father teaches him to act honestly.

77. A brave man is required in battle.

78. A clever speaker is required to quell a riot.

79. When we meet with a difficult passage in the sacred writings, we wish for the presence of a scholar.

80. When one dog meets another he feels inclined to fight, and snarls at him ; so it is with stupid persons, when they meet they are inclined to quarrel.

81. Do nothing hurriedly without reflection, or you will repent at leisure.

82. Those who are grateful God loves ; be gentle, meek, and forbearing to those who revile or slander you.

83. It is unfortunate to be in contact with uncleanness ; more so to be near enemies who hate you ; but to be near those who are ungrateful is to be more unfortunate still.

84. There is a proper time for punishment, and to give advice, and those who receive punishment when deserved, and advice when necessary, should be grateful for it ; but punishment and advice should be given with consideration, and only when merited.

85. Those who are superiors should master themselves, that they may master those who are inferior to them.

86. Separate yourself from those you wish to master, and you will succeed.

87. Inferiors are mastered by presents.

88. To render yourself superior to your equals, you must be industrious.

89. Be thankful to the horse that has carried you safely and swiftly to the end of your journey.

90. Be thankful to the bullock that has carried your burden.

91. Be thankful to the cow that gives her milk freely.

92. Be thankful for the knowledge that has assisted you in difficulties.

93. The wealth of the wise man is like a source or well, which, though water be constantly drawn from it, yet is constantly being replenished ;

94. But the wealth of the rogue is like the sea, which from its saltness cannot be drunk.

95. Rivers do not drink their own waters, trees do not eat the fruits they produce, and the rains do not select particular spots, but distribute themselves equally on the earth ; the virtuous and generous

man resembles these things by dispensing his wealth, charity, and wisdom to all, and by not being selfish.

96. Suffer not ambition to lead you to aspire to impossible things, or to covet things beyond your reach ; but it is proper to aspire to the attainment of possible things which your sense informs you you are capable of reaching by a useful occupation of time ; for it is not proper to be satisfied with a state of idleness.

97. Some prosper without exertion, others with great exertions sometimes fail ; people must not always expect their efforts will be successful.

98. Ignorant persons dislike the wise, but listen with pleasure and follow the advice of the wicked, which leads to destruction.

99. The ignorant cannot keep a secret, but when anything is confided to them, they at once impart it to every one, making a noise like that of a half-filled jar of water when carried.

100. The bite of a snake leads to death, but is sometimes cured by a proper antidote ; but for a person confirmed in wickedness and sin, there is no hope or antidote ; he is in a worse state than if bitten by a venomous snake ; there is no cure for him.

101. A confirmed or thorough fool is he who knowingly and obstinately persists in doing that which he is perfectly convinced is against his interest or well-being.

102. An ignorant fellow, but a notorious robber and dacoit, committed many deeds without being caught, which so filled him with self-conceit that the recollection of his crimes was as sweet as honey to him. He was at last caught, placed in irons, and thrown into prison, and when his difficulties and the hour of adversity came upon him, he then knew that his deeds had been bad ; for the recollection of his evil acts was as bitter as gall.

103. Ignorant people should not be strong, because they are liable to commit acts of violence ; and should they die while so doing, they have no chance of heaven, but are certain of hell-fire.

104. Rats do mischief to houses, monkeys to forests, crows to young birds, and priests to men.

105. A sleepless person thinks the morning is long in breaking ; the tired traveller thinks the end of his journey still distant ; and those who are wicked, and know not the law, think happiness is not attainable.

106. A silly person can discover a fault as small as a teel seed in others, but he has not the ability to discover a fault of the size of a cocoa-nut in himself. A wise man, on the contrary, has not only the

power of discovering faults in others, but hiding his own ; resembling the tortoise, which draws in its head and limbs when it wishes to conceal them.

107. The praise of fools is painful to the wise, but the praise of the virtuous is most gratifying.

108. The selfish and avaricious are gained by presents and bribery, the passionate by submission, the silly by conceding to their folly ; but the wise by honesty and uprightness.

109. Those who are connected with you in business, and work for your benefit, consider them as relations ; but relations who work against your interests should not be considered as relations, for they resemble a disease of your own body ; but the former, although not connected with you, yet resemble the medicine-tree, which, although it grows at a distance, still does you good.

110. Those friends who flatter you to your face, but slander you behind your back, resemble a pot of poisoned honey, which must be thrown away ; for though it is sweet yet it is dangerous.

111. Many cling to you while rich, but desert you when poor ; even relations, friends, and wives ; therefore consider your wealth your best friend.

112. A good servant is known by the cheerfulness with which he performs his work ; a friend and wife in the time of adversity.

113. Consider your partner in business as a relation, those who support you as a father, those who console you in trouble as a wife.

114. Associate not with your enemies, be not too familiar with your friends ; for if you quarrel they will reproach you with your defects which you have acquainted them with. Never admit to your confidence a friend with whom you have seriously quarrelled, for it is as dangerous as opening the side of a mare to bring forth its foal.

115. Quarrel not with an enemy if away from your friends and assistance, but carry him on your back should he desire it ; but if you come to a place where you have assistance, cast him off, and break him like an earthen jar if you can.

116. In putting out a fire leave not the slightest ember behind, in discharging debts leave not a portion unpaid, and in war leave not a single enemy ; for these three things will increase and destroy you.

117. Associate not with those who flatter and fawn upon you with fair looks and words, for they resemble a snake, which, though handsome in shape, has venom in its fangs.

118. Separate yourself from a cruel master ; but he is preferable

to the hasty-tempered ; but, above all, the oppressive master is to be shunned.

119. Keep fifty cubits from horned cattle, one hundred cubits from horses, one thousand cubits from elephants ; but from a fool run away to some other country.

120. Run away from a bad district, a false friend, bad relations, and a bad wife.

121. A good friend is one who when you are sick attends upon you and gives you medicine, who feeds you when you are hungry, assists you when in poverty, delivers you from your enemies, who will plead for you when in trouble with your rulers, and at the last get execution of judgment put aside ; such a friend is to be prized and cherished.

122. The cuckoo's notes are pleasant, a beautiful woman's glory is in the acquisition of a good husband, a plain person in his learning, priests and hermits in their patience and forbearance.

123. A woman's wealth is in her beauty, a man's wealth in his knowledge, a priest's wealth in religion, the wealth of kings and rulers in their revenue.

124. Priests and hermits are handsome when lean, four-footed animals when fat, men when learned, and women when married.

125. Buffaloes delight in mud, the bird henza in beautiful lakes of clear water, women in the society of men, and priests in the words of truth and wisdom.

126. Be thankful for a feast when you have partaken of it.

127. Trust not a woman who has separated three times from three different husbands, a priest who has changed to three different temples, or a bird that has escaped three times from the snare of the fowler ; they are very cunning and deceitful.

128. The wicked are tamed by punishment, false friends are mastered by shunning them, a wicked or unruly wife by taking all your property out of her keeping, a gourmand is mastered by starvation.

129. The night without moonlight is not beautiful, the sea without billows is not beautiful, a woman without a husband is not beautiful to contemplate, for from a husband she derives her ease and comfort ; she is but able to take care of the property he accumulates, which she retains as a box, the husband being the source of all her happiness ; and it well may be said that the woman is like the thread in the needle, which follows where the latter penetrates and leads.

130. Women are as prone to sin as rivers to run crooked, and as full of wickedness as forests are of fuel.

131. When a woman is fond of contradicting, of backbiting, and slandering, who is quarrelsome, envious, and wishes for all she sees, who is greedy and eats her meals before her husband, who is always gadding about to other people's houses, with such a woman remain not ; separate from her.

134. A good wife is as a brother to her husband when he eats or dresses, resembles a sister in modesty when in private with him, a slave when he is preparing for a journey, a friend when in difficulties ; she comforts him quickly to sleep, she attires herself neatly to please him, she forbears kindly when he is angry ; such a woman has been described by the learned as an excellent woman, and when she dies will attain to a heavenly state.

135. If a young maiden has a golden complexion, a face with the expression of a deer, a long waist, wide hips, small stomach, thighs and legs tapering like an elephant's trunk, hair that reaches to her heels and turns up regular, and even teeth, and deep navel ; should you meet such an one, consider not whether she be poor or rich, but marry her.

136. November is the best month ; a handsome woman the best thing ; the eldest son the most prized ; and the north side the most liked.

137. Should a woman desire to be born a man in the course of transmigration, she can only attain this by treating her husband as the angels' wives treat their husbands, with love, respect, and attention.

138. Should a man desire to return to earth as a man when death and transmigration occur, he should avoid committing adultery, as he would shun treading in a miry way.

139. Old age and extreme youth should not unite in marriage, for it leads to misery and unhappiness.

140. Kings and ministers should sleep but a quarter of the night, philosophers and learned men but half the night, merchants and traders three parts of the night ; but beggars may sleep the whole night.

141. In a country that has no capital, government, learned man, doctor, or river, remain not a day.

142. In a place where you are not appreciated, where no one loves you, where you have no friends, where you cannot learn, remain not a day, but be off.

143. In a house without children there is quietness ; in a well-governed country there is quietness ;—dark-complexioned and poor people are quiet.

144. He who wishes for riches, must trade (speculate) ; he who

wishes for learning must attach himself to those who have wisdom ; and he who wishes for a family must marry a young woman ; he who aims to be prime minister must study to please the wishes of the king.

145. When priests and kings become dissatisfied, there is no chance for them, they are lost ; a woman of good family, without modesty, is lost ; a foolish woman who assumes modesty is lost.

146. A bird's strength is the air ; a fish's strength the water ; the strength of the weak is in the law, and the strength of children in their parents.

147. Rulers should pride themselves in forbearance, intelligence, energy, discrimination, tenderness, forethought, for these bring satisfaction and contentment.

148. Rulers and priests should have but one true word, from which they should never depart.

149. A man who is married and has a family, but stays at home without working, or exerting himself for their benefit, is lazy and good for nothing ; a priest who has not command over his tongue is bad : the governor or magistrate who acts without consideration is worthless ; a person who considers himself clever should never lose his temper.

150. When there is a difference of opinion and discord among the learned, confusion is sure to follow, and bad results therefrom.

151. Kings should personally know the amount of their revenue and of their expenditure, the quantity of food necessary for the subsistence of their subjects, and inform themselves as to the manner in which the duties of the civil and military services are executed.

152. Repress and keep down those who misbehave, and exalt and reward the deserving.

153. Fire, water, women, fools, snakes, and rulers should be avoided, for they lead to sudden death.

154. He who lives in the same house with a wicked woman, a wicked slave, or a venomous snake, is in danger of death.

155. A clever master loses his reputation in striving to teach a fool who will not learn ; a man loses his honour who lives with an unchaste wife ; and those who associate with the wicked lose their characters.

156. Lay not the sin upon the child but upon the mother ; when a pupil takes to evil blame the teacher ; when the people of a country act improperly blame the rulers ; when kings do wrong blame the ministers.

157. Anger is conquered by gentleness ; the unjust are conquered by justice ; the irritable are mastered by coaxing and presents ; liars are conquered by truth.

158. A generous man, though vulgar, becomes refined ; a generous man can carry out his wishes with ease ; the words of a generous nature are sweet ; a man of an amiable disposition is always easy to approach, and you can become acquainted with him ; he also can form the acquaintance of whom he wishes. What is generosity ? the medicine of love. What is stinginess or avarice ? the medicine of hatred. Generosity is a popular medicine ; stinginess is a private medicine.

159. Union is strength ; many small fibres united will hold an elephant.

160. A general or king who does not conquer with an army well provided with arms and stores, of what use is he ? he is as a light which will expire by the smallest breath of wind.

161. Seek not to imitate the pleasures of your rulers, nor their ways, dress, or conversation ; perfume not yourself as they do, for they are neither your friends, relations, or equals, but your superiors.

162. When you approach your superiors, keep not at too great a distance, or approach too near ; place not yourself between the wind and them, neither place yourself directly in front of them, or in too high or too low a position ; study to avoid these six faults, as you would a burning fire.

163. A person with the highest qualifications comes to no advantage, if not supported by his king ; a precious jewel is only seen to advantage when set in gold.

164. Believe not a priest religious who converses with women ; nor in the humanity of a man who indulges much in the eating of flesh ; nor in the promises of a drunkard, or the modesty of a sensualist, or the knowledge of a lazy person, or the wealth of a bad-tempered man.

165. For the drunkard, night-walker, gambler, lover of plays, and those who associate with lazy people, there is no ease or comfort in life ; they will be destroyed after death.

167. Look before you speak in the daytime ; at night look to the right and left, before and behind ; as a hunter considers the dangers of the forest, consider before you speak.

168. Four kinds of living men were called dead men by the author. Who were they ? First, an extremely poor man ; second, a much oppressed man ; third, a most ignorant man ; and fourth, a favourite minister. These may be considered as dead men.

169. The wise man avoids danger, and sees it from a distance ; but if it overtakes him he fears not.

170. For the sluggard, for the man of bad memory, for the spend-thrift, for the avaricious, for those oppressed by disease, for the lazy, and the careless, for these seven characters, there is no place in Holy Writ.

171. Say not to wealth go not to the rich man, for he has plenty, but go to the poor man ; nor to the clouds rain not in the sea or in the rivers, for there is already plenty there, but rain alone upon the earth : for where Providence directs thither will they go.

172. The teacher should not expend the whole of his knowledge upon his pupil, he should retain something to himself that his disciple may respect him ; even so in all things, expend not the whole of thy store, keep a reserve.

173. Silk-cotton is the lightest thing, but lighter than this are careless persons ; those who obey not their parents and teachers are the emptiest and lightest of all ; but those who neglect their religion and God are lighter than air.

174. Rocks are heavy. What is heavier ? the voice of the Náths. What is of greater weight ? the advice of parents and teachers : but the words of God are of greatest weight.

175. The right hand is the slave of the body ; the little finger the slave of the eye, the nose, and the ear ; the left hand the slave of the feet.

176. The cow should be respected and appreciated, as she nourishes man ; and should therefore be considered as a mother, as her milk gives him food, and she conduces to his ease and comfort : all men eat her flesh, but those who do so, eat as it were their mother's flesh ; it should not be eaten, but when she dies her flesh should be given to the vultures.

177. Those who commence their studies on a Thursday learn thoroughly ; those who commence on a Sunday or Friday obtain mediocrity ; those who commence on a Saturday or Tuesday are liable to die.

178. To commence studying on the eighth day of the increase or wane of the moon is equal to killing the teacher ; on the fourteenth of the increase or waning moon it is equal to killing the pupil ; on the tenth increase or wane, it is equal to the destruction of all learning ; on the full moon, it is equal to killing your parents.

179. Those who wish to learn should not on the seventh day of the increase or wane of the moon eat of coco nuts ; on the third increase or wane they should not eat venison or the flesh of any other animal, for if they do they will lose what they have learned, by forgetting it.

180. Sacrifice and abandon your friend for your family, if necessary; sacrifice your relations for the good of the public; for your own interests, sacrifice the earth you live upon, and remove to some other spot.

181. The lion, the elephant, and the wise man are never found but in a place suitable for them; but the crow, the deer, and a low person always remain in their old place.

182. Consider well before leaving a place where you have been long a resident, to remove to another where you are a stranger.

183. Go not unarmed to the battle field, and do not commence argument without being prepared to cite your authorities.

184. A merchant who travels to buy or sell in foreign countries, as well as those who travel for pleasure, should be accompanied by some friend who is acquainted with the country.

185. Hide from the world thy losses, thy grief, thy domestic troubles, and the intrigues and insults of thy enemies.

186. To show your wisdom, speak according to your position, love those of your own rank, and moderate your anger to your position.

187. There are three kinds of fools: those who have limited means but live above them; those who have no strength but are always fighting; and those who have no sense but are always arguing.

188. There are three kinds of detestable characters: those who visit without being invited; those who volunteer their advice without being asked, and talk scandal; and those who vaunt their own praises.

189. Ugly people are very talkative.

190. A stupid man betrays his own ignorance and proclaims his own disgrace.

191. A cow that has no milk kicks if you try to milk her.

192. A frog once thought itself a lion, because its posture when seated was the same, but a crow seized the frog and made it croak for fear; so is it with those who assume a knowledge of what they do not understand: when they are in the company of those who have knowledge, fearing that they may be questioned, they cry out "Master, master," and show great civility. Can the wild boar think itself a cheetah, because his grunting somewhat resembles it? Does the cat imagine itself a tiger? Does the person consider himself wise, because he resembles a philosopher?

193. Those who refuse to learn when young, will, when grown up, have to carry the loads, pull off the boats, and serve those who have learning.

194. Those who are learned are bowed to by the ignorant.

195. The thorns upon the tree grew there, so learn to form thyself.

196. Who polished the eye of the deer?

197. Who gave to the lily its fragrance?

198. A good tree will produce good fruit.

199. There is no enemy like disease.

200. Men love themselves more than anything else.

201. Good deeds meet with their reward.

202. A crab has no head, but he can come and go as he chooses.

203. A fowl has no milk, but she can bring up her young ones.

204. One good man is found in a hundred, a learned one in a thousand, a liberal one rarely; but a perfect one in a million.

205. An ambassador should not be ashamed; when learning, buying, selling, or amusing yourself be not ashamed.

206. Women consume twice as much as men; their sense is four times greater than man's; their industry and energy six times greater; and their passions eight times greater.

207. The top of the sugar cane is saltish, but it increases in sweetness in every joint to the end; so is a true friend, he increases in goodness from the beginning to the end. A wicked friend also resembles the sugar cane, with this difference, that he increases in wickedness.

208. The four causes of a country's prosperity are good cultivators, commercial men, good ministers, and priests.

209. If study is neglected, learning is forgotten; those who are poor keep an uncomfortable house; those who are beautiful but lazy, are untidy; a priest who forgets his dignity is unclean and degraded.

210. The property of those who are lazy goes to those who are industrious; the fool says it is fate, the wise man says it is not so; industry must never slacken, and you are sure to thrive; your conscience moreover will gladden you.

211. If a man in these times be ugly, ignorant, and vulgar, but withal rich, he is considered faultless, says the author.

ART. X.—*Notes on the Ruins of Wallabhipura.* By A. K. FORBES, Esq.

[*Read 4th June, 1853.*]

On the western shore of the Gulf of Cambay, a few miles to the north of Bhaonagar, among a range of granite hills which, lying in a country level as an immense unruffled lake, appear like a cluster of islands floating on the waters, nestles the little township of Chamardi. Overhanging this village on the eastern side is a rugged peak dedicated to Mátá Kodiar, at almost the pinnacle of which a huge boulder of granite, bearing at a distance some resemblance to a kneeling human form, is worshipped by the rude villager as the image of that potent goddess. To the summit of this hill it is proposed to conduct the reader, who may be inclined to contemplate the prospect which thence meets the eye of the observer.

Immediately below him, amidst many other such cavities apparently hollowed out by water, and countenancing the traditional belief that the rocks of Chamardi were once washed by the waves of the ocean, is an unhewn cave capable of containing forty or fifty persons, and which the legendary tastes of the Hindus has associated with the rugged champion of Draupadi; similarly some large detached masses of granite below and near to the foot of the hill are believed to have amused the childhood of Bhima and his brothers. About half a mile to the south-east, below another hill—the granite rocks of which, like those of all the Chamardi range, are overlaid with freestone in various stages of hardness, and which bears the marks of the quarryman's labours, lies a collection of miserable huts called "Old Chamardi." To the south of Kodiar's-hill a well supplies the villagers with purer water than that which they can draw from the mason-work bhauli which their town contains; and further westward, in a picturesque gorge, a rock, which has been hollowed out into the shape of a cobra's hood, stands ready to fulfil its traditionary destiny, and overwhelm the bridal procession of some incautious Kansará. Above the roofs of Chamardi, and the villagers' hay-stacks piled on slippery granite boulders, rises another peak, which is still surmounted by the remains of a mosque dedicated to the prophet of Arabia. Southwards

a short interval of ground level as water, affords space for the river Kalumbhar to wind its uncertain streams between the rocks of Chamardi and a conical hill which bears the name of Ishalwo. This hill is crowned by the remains of a fortified building, and, at its foot, a mutilated image, wearing the cap and ear-rings of a Vairagi upon its dissevered head, and buried in the ground up to the waist, reclines beneath the shade of the slow-growing Pilu. Hence, bending northwards, the river runs along a level plain near the base of a hill dedicated to, and deriving its name from, Thápnáth Mahádeo. A temple, containing the symbol of the god with the accompanying Nandi, occupies the summit; and near it are fragments of other religious buildings, and two lingas, which, though hewn out of granite monoliths, have not escaped the power of the destroyer. The houses and huts of a colony of Gosains cluster at the foot of the hill, fringed by the funeral memorial of the sati as well as of the ascetic; and within one of the Gosain's houses is the entrance to a cave, said to be of endless length, which the adventurous spirit of the Rajputs of Chamardi, aided by the religious zeal of the devotees of Siva, has as yet been found inadequate to explore.

At the hill of Thápnáth a Mela assembles yearly on the last day of Shráwan; and when a delay in the fall of rain, or an epidemic raging alarms the inhabitants of Chamardi and the neighbouring town of Walleh, the Raja and Grasias perform a "mantra," or extraordinary worship to conciliate the Bhawo, whose broken image lies at the foot of Ishalwo. Beyond Thápnáth is another island-like hill called Chogat, which is believed to contain copper ore, and which forms the termination of the range.

North and east of the peak of Kodiar, winding not far from the town of Walleh, may be observed the salt-water creek, which is called the Bhaonagar, or "the former" river, and which, passing the port from which it derives its name, and the town of Ghoghá, rushes with great velocity through the channel which separates from the mainland of Katiwar the curious and interesting island of Perambh. This creek is navigable for the craft of the country to a point equidistant between Bhaonagar and Walleh, called Ghelari Bandar, at which the hardly discernible traces of brickwork buildings are still pointed out to the inquirer. Up to this point cultivation of wheat and cotton has faintly struggled on; and near the bandar a few hovels are collected together and dignified with the names of Anandpur and Rajpur; but beyond these little *clachans*, whose inhabitants bring the water which they drink from the neighbourhood of Walleh, the plain, assuming a still more sea-deserted form, stretches onwards, uncultivated and

uninhabited, to the point where it is reached by the high tides of the Gulf. Immediately north of Bhaonagar may be discerned the tall masts of three or four vessels, which still remain the property of the Chief of the Gohils ; and close beside them the receding tide discovers vestiges of foundation-work of brick and stone—all that remains of Dhutar Patan, the "city of cozeners." A little further seawards, a low hill, scantily clothed with trees, is surmounted by the shrine of Rawapuri Mátá, beside which an overturned jáládhar has become a celebrated ordeal stone under the name of the "window of truth and falsehood." In the creek opposite Rawapuri's temple is a bank oozing with discoloured water, and with which a legend is connected, bearing testimony at once to her willingness to protect and her ability to destroy. Two warriors, it is said, lived at the ancient village of Wadawá, near Bhaonagar ; they were very wealthy, and trafficked as merchants. On one occasion, returning home with their sons in separate ships, laden with oil and madder, after a prosperous voyage, they had neared the port of Bhaonagar when a terrible storm arose. The women left behind at home, anxiously awaiting the return of their husbands and sons, and terrified at the fury of the tempest, hastened with offerings in their hands to seek the protection of Adi Shakti in her temple at Rawapur. The one unhesitatingly vowing to offer her son to the goddess on his safe return, was welcomed with gracious assurances of protection and favour ; but the other, hesitating from "avarice of her child," received the angry answer, "Why keep you back from me? Your ship is lost, I have taken your son ; depart, childless, lamenting." The next day the ship which carried him who had been dedicated to the service of the goddess lay safely in the harbour, while its companion, sunk with its cargo in the creek, originated the bank which has been described, and which, continually, oozing oil and madder, remains a standing memorial of Rawapuri's vengeance.

The spectator still supposed to be standing on the summit of Kodiar's-hill, would, on turning to the south, behold an outline diversified by mountain ranges. A few miles inland, and somewhat to the south of Perambh, rise the Khokhra hills ; nearer, and further to the west, a rocky range encircles the "lion city" Sehore ; and still westwards in the distance, the noble form of the sacred mountain Satrunjaya, crowned with a rocky upper-hill, covered with palatial buildings, rises above the towers and minarets of Palitana.

Far different, however, is the view which meets the eye on turning to the north. From the base of the Chamardi Hills a vast and level plain of black soil, covered annually with crops of wheat or

cotton, and broken only by the streams which vainly struggle to force their way eastwards along its surface, extends in monotonous uniformity to the horizon and, far beyond it, to the town of Dhandhuka and the head of the Gulf of Cambay. In this plain, a few miles to the north of Chamardi, lies the modern town of Walleh, and the remains of the ancient city of Wallabhipur, and further on, as if to complete the historical interest of the scene, a tall minaret shows the town of Loliyánah, where for many years the lieutenants of the Mussulman padishahs collected the revenues of the province, while, close beside the fallen mosque, the vulgar Maratha has built his snug temple, and placed upon its front the following badly spelt and rudely engraved inscription—

“ The impress of Siva’s foot, with
Assiduity, Damaji Gaikwar
Worships continually.

Samvat, 1794. Jeshabhad 3.” [A.D. 1737.]

The town of Walleh belongs to a younger branch of the house of the Gohils, who have given their name to this portion of Sorat. It contains, on a rough computation, a population of about three thousand souls. A jungle of Pilu trees of considerable extent lies on the western and northern sides of the town. It is traversed by roads in various directions, and includes the principal part of the remains of Wallabhipur, which are exposed to view. Numerous excavations have been made, some of which are fifteen feet in depth, and which exhibit the foundations of walls, frequently four feet and a-half wide, constructed of large burnt bricks and earth. There is no *chunam* used, and hence the bricks readily separate from each other, and little difficulty is experienced in extricating them in a perfect state. The largest measure one foot four in length, ten inches in width, and three in depth. The trenches in some places assume the form of mines, and are carried down occasionally to water which is found to be salt. From many of these pits bricks have been removed until the depth of the excavation becoming inconvenient it was abandoned for another which could be worked with less labour. In this jungle, as has been remarked, are the principal remains which are exposed to view, but similar brick foundations are occasionally discovered on all sides to within a distance of two kos around Walleh. On the north of the town the site of a tank, which bears the name of Ghorardaman is pointed out, and to the south-south-west is a large flat space, covered in the colder months with a rich clothing of green wheat, which is called the “Ratn Talao,” and of which the sur-

rounding mound may still in some places be traced. In the excavations at present made but little character can be discovered, they afford no clue which could assist in tracing out the streets and mansions of the devastated city; the miners dig down to the walls merely for the purpose of taking the materials from them, so that their labours are in fact purely destructive, every basketful of bricks which they remove from the ruins diminishing the chance of future success in examining the remains.

Round the outside of the Pilu jungle runs a stream, which from its frantic movements during the monsoon, is called "Ghelo" or insane. It alters its course frequently, and has been the most active agent as yet employed in the discovery of the remains of Wallabhipur, in which task it has however been considerably assisted by the occasional streams formed, for the time being, during the rains, by an accumulation of water struggling to find for itself a means of escape in this level soil.

Within the space occupied by the Pilu trees, and in fact on all sides of Walleh, are to be found numerous emblems of Siva and of Nandi, his attendant, formed of granite and considerable in point of size. One of these, which is sunk in the earth so that the top only being visible may be mistaken for a granite globe, is called "Batheswar Mahádeo," and is supposed by the Hindus to be enabled to defy all attempts made for its removal. Near Batheswar is a large bull of granite, wanting the head and split across the body into two pieces which are lying close together. It is exceedingly well executed, and unlike more modern figures of Nandi is placed in the true position of a sitting animal. Further west of this is another linga, called "Nandeswar Mahádeo." It is a single granite stone, commencing with a square pedestal two feet high, surmounted by a cylinder rounded at the top, which is three feet in height and eight and a-half in circumference.

There are near Walleh many other such symbols of Siva similar in form and size, some of them, however, ascending from the square into an octagon, and thence into the cylinder. The lingas are themselves mostly entire, but in every instance the Nandi which accompanies them has been broken. Amid some ruins which a streamlet has laid bare, on the verge of the jungle, is Vaynath; on the south of the town are Ramnath, Kamnath, Bhatnath, and Ratneswar; on the east Bed-Bhanjan; on the north Wankeswar and others.

No great distance from the Hill of Thapnath, on the left hand of the road which leads from thence to the village of Pate, is a mound called Ishwar Timbo, upon the summit of which there is a granite

linga, called Ishwari Mahádeo, and a Nandi smaller than, but equally well executed with, that at Batheswar. The linga is in a square jaladhar, and close beside it lies another of these pedestal stones, which resembles exactly the ordeal stone at Bhaonagar. A monsoon-formed streamlet hard by has laid open a corner of stonemason work which is about six feet wide, and of which about fifty feet in length is visible.

ART. XI.—*On the Date and Personality of Priyadarsi.* By
R. G. LATHAM, M.D.

[*Read 3rd December, 1859.*]

THE present paper will fall into two divisions ; the first of which deals with the name and date of Priyadarsi as they appear in the Edicts, whilst the second will take notice of the doctrines introduced *ab extra*; by which is meant the hypotheses connected with the names Asoka and Chandragupta. The reasons for this separation are cogent. In the first place the degrees of confidence with which the author expresses himself are different. In the one series of questions he is, to a great extent (though not altogether) in the position of the biblical historian, who, although he be ignorant of Greek and Hebrew, has, nevertheless, a sufficient store of facts in the standard translation of the Old and New Testaments to put him, for nine points out of ten, on an approximate level with the professed scholar. The Edicts themselves are not only accessible to the general reader through the translations of Prinsep and Wilson, but the *data* that bear immediately and decidedly upon them are accessible also. So far as they lie in the coinage of the Bactrian Kings they are to be found in the pages of the *Ariana Antiqua* and the *Journal of the Asiatic Society of Bengal*. So far as they lie in the texts of the classical writers they are simply so much Latin and Greek. It cannot be said that very much requiring special learning in either the Sanskrit or the Pali presents itself during this stage of our inquiries. When, however, Priyadarsi gets identified with Asoka and affiliated to Chandragupta, all this comparative independence of the special lore of India vanishes. The writer, who cannot go into first-hand inquiries must take his facts as men more learned than himself think proper to give them. He can criticise their logic ; he can see whether the evidence that they bring forward sanctions their results ; but he can never be sure, except on their own admission, that the evidence, when insufficient, has been exhausted, and that better reasons than any he has seen may not be lying in the background.

For the edicts, however, and the texts which immediately and decidedly bear upon them there is, at least, an approximation to something like equality between the laity, or general students, and the

high priests, or special scholars. The *whole* of the materials are accessible to the world at large; or (if not the whole) an adequate proportion of them.

In the second place, this separation of the material elements from the accessories is imperatively called for by the nature of the questions to which they apply. Nothing is more injurious than the habit of putting inferences, however satisfactory, on a level with the primary historical facts to which they attach themselves. First comes one deduction; which, in the eyes of its author, is perfectly unexceptionable. Another follows—unexceptionable also. And then, another; and another still. And then a system; until the primary fact, lost and overlaid by its adjuncts and encumbrances, becomes the least part of itself. When this is the case, it sometimes happens that a new application of it is demanded; so that it may require to be seen under a different light, and from a fresh point of view. It is now, however, difficult to isolate it; difficult so (as the Germans say) to purify our idea of it. It presents itself to us with a certain number of its associated doctrines adhering to it, and requires an effort to be seen rightly.

The notion of what we may call the pure and simple Priyadarsi of the pure and simple text of the Edicts, without subtraction and without addition, with the recognition, too, of a broad distinction between what the text *allows* and what it *demand*s has yet to be exhibited.

Now what does the text of the Edicts *require*? Taken by itself it requires him to have reigned twelve years—possibly and probably more—but certainly not less. Does it require him to have been a contemporary of Antiochus? Yes. Does it require him to have been a King? Yes. Does it require him to have been a King in India? Yes. Does it require him to have been an Indian King; by which I mean a native ruler? No. It allows him to have been one. It does more. It supplies strong presumptions in favour of his having been one; but it in no wise binds us to look for him in India and nowhere else.

We look, however, towards India first. And what do we look for? The *name*—the name, if not *literatim*, at least, *verbatim*. Word for word, we want PRIYADARSI. We don't want its synonym. We don't want a translation of it. We want the word itself. In India, however, we find but one name at all—and that is that of *Sophaganeus*, a King placed, by Antiochus the Great, over either a part of India itself, or on the Indian frontier. Place for place and time for time, this is not unsuitable—but, on the contrary, very square

and fit. Word for word, however, the names are too unlike for even the boldest manipulator of letter-changes to identify.

Failing in India we look elsewhere. We are bound to seek, though not to find. Bactria gives us nothing more promising than the following :—*Theodotus, Euthydemus, Demetrius, Eukratides*, and *Helioekles*.

Failing in Bactria we look to Parthia ; and in Parthia (if the present paper be true) we both seek and find. Word for word, I believe that PRIYADARSI is PHRAATES.

Such the doctrine, which must be considered in respect to

- 1st. The form of words ;
- 2nd. The conditions of place ; and
- 3rd. The conditions of time.

Phraates = Priyadarsi.—Little need be said in favour of the Kapur di Giri form *Priyadarsi*, being a nearer approach to the real name than the *Piyadasi* of the Dhauli, Girnar, and Cuttak monuments. The *r* is, all the world over, and in India most especially, more easily omitted where it has previously existed, than inserted where it was originally absent. Little, too, need be said about the Persian forms being varied, viz., *Phraortes*, *Phrahates*, and *Phraates*. Neither need we enlarge upon the fact of the word as we have it in the Greek and Latin writers being itself a secondary form. The real name by which certain Kings of Parthia were called by themselves and their subjects, was, in all probability, as far removed from *Phraates* on one side as from *Priyadarsi* on the other. At the same time it is by no means impossible that the Indian form was taken directly from the Greek.

It is not, however, necessary to multiply preliminaries upon this point ; for, fortunately, the circumstance of an Indian rendering of the name *Phraates* saves us some trouble. On the reverse of one of the coins of the Ariana—one of *Gundophares* or *Undophares*—the name actually occurs, and that as *Pharahatasa*. It is admitted that this is but an approximation to the form required by our hypothesis ; whilst, at the same time, it must be remembered that the conditions in the way of time and place, of the *Pharahatasa* coins, though very similar to those of the *Priyadarsi* Edicts, are not exactly identical. The latitude, however, that may be allowed in our identification is conveniently, though roughly, determined by comparing the Greek names of the Bactrian Kings with the Indian equivalents ; in

other words, by copying a certain number of legends from the *Ariana Antiqua*.

Thus

The Greek	<i>Heliokles</i>	is in Indian	<i>Heliyaklaya</i>
"	<i>Lysias</i>	"	<i>Lisiasa</i>
"	"	"	<i>Lisikasa</i>
"	<i>Amyntas</i>	"	<i>Amitasa</i>
"	<i>Antimachus</i>	"	<i>Atimakhasa</i>
"	<i>Philoxenus</i>	"	<i>Pilashinasa</i>
"	<i>Antialkides</i>	"	<i>Antialikitasa</i>
"	"	"	<i>Atialikitasa</i>
"	<i>Archebius</i>	"	<i>Akhabiysa</i>
"	<i>Menander</i>	"	<i>Minandasa</i>
"	"	"	<i>Minadasa</i>
"	<i>Apollodotus</i>	"	<i>Apaladatasa</i>
"	<i>Diomedes</i>	"	<i>Tayamidasa</i>
"	<i>Hermæus</i>	"	<i>Ermyasa</i>
"	<i>Agathocles</i>	"	<i>Agathakalyaja</i>
"	<i>Pantaleon</i>	"	<i>Patalavata</i>
"	<i>Mayes</i>	"	<i>Maasa</i>
"	<i>Abagarus</i>	"	<i>Abakhafasasa</i>

Of these forms the ones that most command attention are *Pilashinasa* and *Tayamidasa*. The former as compared with *Philoxenus* gives us the P for the PH; the latter gives the y between the vowels, and the termination *as*, instead of *es*. The insertion of y is also given in *Heliayklaya*.

Place.—I pass over this *sicco pede*; presuming that if the conditions which next come under notice—those of time prove valid, the question of place may be left to take care of itself.

Date.—This is of primary importance. According to Heeren the twelfth year of Phraates I., King of Parthia, was B.C. 169. Now this is *not* the year that gives us the simplest results. To say nothing about the complications engendered by the names rendered Magas, Antigonus, and Alexander, of which notice will be taken hereafter, B.C. 169 is not the year wherein the ordinary interpretation of the ordinary texts places the chief Parthian invasions of India. It is not the year for which they give us even inroads upon the frontier. It is not within twenty years either way of any such recorded inroads—not, at least, according to the ordinary interpretation of the ordinary texts. It is either too early or too late; as we may see by taking a survey of

the history of Eastern Persia for the times anterior and subsequent to it. If so, King Phraates gives the very worst word we could have chosen. He has a suitable name and nothing else. If he is remarkable for anything at all, he is remarkable for coming between two periods, in each of which there were Parthian attacks upon India—himself being agent in neither.

Thus, between B.C. 216 and B.C. 196, we have the reign of Artabanus I; and this, as far as everything but the name goes, gives us all we want. It gives us an Antiochus with whom it is imperative that Priyadarsi should be contemporary—Antiochus the Great. It also gives us a Ptolemy, similarly demanded by the text of the Edicts—Ptolemy Philopater. But it gives us no name better than Artabanus. Meanwhile Euthydemus is reigning over Bactria; concerning whose relations with Syria and Parthia we have the following account. Artabanus, the third King of his line, has to defend Media against Antiochus; which he does with sufficient effect for hostilities to end in a compact; one of the conditions of which was that Bactria should be attacked by the conjoint armies—Bactria under the rule of Euthydemus. But this invasion also ends in another compact, in virtue of which Demetrius, son of Euthydemus, is commissioned to make conquests in India. They are made; and ceded to Sophagasenas, a native chief. A fair amount of detail is known concerning this campaign which, though, in the main, Syrian, Bactrian, and Indian, is Parthian so far as the alliance between Artabanus and Antiochus is concerned.

From B.C. 196 to B.C. 181 Priapatius, the only King of his name, reigns over Parthia. Of him we know the name only. He is succeeded by the object of the present notice.

Phraates I, having reigned from B.C. 181 to B.C. 144, is simply said by Heeren to have conquered the Mardians on the Caspian. This is little enough for a reign of 37 years; and little as it is, it is anything but either Bactrian or Indian. Be it so. All we do at present is to note the long duration of his reign. His brother Mithridates I. succeeds him, and dying in B.C. 136, reigns eight years. Now Mithridates I. is pre-eminently the Parthian invader of India. He "raises Parthia," writes Heeren, "to rank among the mighty empires of the world." He reduces Media, Persia, Babylonia, and extends the frontiers of his kingdom "westward to the Euphrates, and eastward to the Hydaspes."

Truly, then, may we say that Phraates is either too early or too late for our purpose. Had Artabanus borne a manageable name it is probable that, when once reconciled to the idea that a tender-hearted

Buddhist could possibly be a bloody-minded Parthian, we might have identified him with Priyadarsi, on the strength of the extent to which the conditions of both time and place favoured his claim to the appellation. With Mithridates (had *his* name been practicable) I imagine that we should have found still less difficulty.

Now it is not unreasonable to suppose that, during the long reign of his predecessor, the Mithridates may have been an active lieutenant, and have done work as heir to the crown, the records of which bear the name of the ruling monarch. Other assumptions are tenable—not to say probable. We may assume, for instance, that Artabanus (the ally of Antiochus the Great) kept his hold on a certain portion of Bactria and transmitted his occupancy to his successor. Or we may assume that Phraates I. was a great conqueror, though an unrecorded one. The *minimum* amount, however, of hypothetical matter lies in the doctrine we find suggested. It is true, no doubt, that the conquests in India are always given to Mithridates I., *eo nomine*—to Mithridates the *King* of Parthia. We must remember, however, that the writers who notice them are either general historians, like Justin, or authors, like Polybius and Strabo, whose mention of the affairs of the far East are little more than *ebiter dicta*. Polybius, no doubt, lived during the times of which he gives the history. In *place*, however, he was far removed from either India or the Indian frontier. Do we not even now speak of the Duke of Wellington's career in India—the Duke of Wellington, who, to improve the comparison with Mithridates, had a brother a Governor-General, in whose name, as in the name of Phraates, Edicts were framed and proclamations issued?

With the dates as we find them in Heeren's Manual of Ancient History the doctrine under notice is scarcely an assumption at all. With Heeren's dates it is almost a necessity. Heeren's giving Mithridates I., from B.C. 144 to B.C. 136, requires 139 and 140 (if not more) for the well known war against Demetrius II. of Syria; a war which was carried on at the extreme edge of the frontier most distant from India. This so breaks up his short reign of eight years (for only by so much does he survive his brother) that the operations in India requisite for the conquests attached to his name are (to say the least of them) extremely improbable.

Lest any one should think that the confusion between Mithridates the Crown Prince and Mithridates the King, is improbable, I have only to remark that it is to be found in the pages of Heeren himself. In his notice of Parthia, Phraates reigns from B.C. 181 to B.C. 144. In his notice of the Seleucidæ he writes that "while the Parthian King, Mithridates I., is prosecuting his conquests at the expense of the Syrian

Kingdom in Upper Asia, Demetrius secretly escapes out of Rome, takes possession of the throne, and causes Eupator and Lysias to be put to death." The date is B.C. 161. I have not gone into the examination of the authorities for this coincidence between the death of Eupator and the absence of Mithridates in India. It may rest upon the authority of a classical writer ; or it may merely be an example of the habit in which too many modern historians indulge of making things neat and square, by putting together events in way of cause and effect which may or may not have been so connected. It is clear, however, that, whichever way we view it, it favours, rather than opposes, our doctrine.

So much for the dates as they present themselves in Heeren's manual ; a work to which I refer simply because it is a convenient one. Much of what lies in the present paper consists in the inferences deducible from certain coincidences of date, and in order to show the extent to which they are undesigned, I take the numbers as I find them in the ordinary works. This ensures them against being adapted to any preconceived system. Now the dates of Heeren are not the dates of the *Ariana Antiqua*. The differences, however, touch the date of the *death* of Mithridates, rather than that of his *accession* to the throne. Now the earliest period for the *end* of his reign is B.C. 140—a period which creates no difficulties in the question in hand. In respect to his accession the date of B.C. 181, suggested by Bayer, is exactly the date assigned by Heeren to Phraates I. For his conquests in India, Raoul Rochette suggests B.C. 155 ; Bayer B.C. 147.

Antiochus the Great dies B.C. 164. Eukratides begins to reign about B.C. 181, and reigns long. He is evidently a powerful Prince. Without ignoring the argument that the Mithridatic conquests were more likely to have taken place after the death of Antiochus than before it, and that a powerful prince like Eukratides is not exactly the likeliest man to allow of Parthian conquests in India, I am not prepared to overvalue it. Powerful kings have found it politic to part with portions of their territory ; and, both before and after B.C. 169, alliances like those between Syria under Antiochus, and Bactria under Euthydemus and Eukratides, have been abandoned. At any rate the likelihood of Mithridates having invaded Bactria (though not India) is expressly admitted in the *Ariana Antiqua*—"although we cannot admit that Mithridates invaded India during the reign of Eukratides, yet there is little reason to doubt that, under him, the provinces contiguous to Parthia on the east and north-east, Asia, parts of Drangiana and Arachosia, Margiana and part of Bactria

proper, were annexed to the Parthian Kingdom." Again—"there is positive testimony, and it is consistent with probability that the Parthians dismembered Bactria and detached from it two of its satrapies, even in the reign of Eukratides. It is not specified under what Parthian King; but it may have been under Mithridates." This is all that the present doctrine requires. It merely requires that the dismemberment in question should have been effected by Mithridates as Crown Prince rather than by Mithridates as King.

The names of the two conquered satrapies now command our attention, viz., *Aspiónus* and *Turiua*. Such, at least they seem to be. In the text of Strabo (xi. ii. 3) the former appears in the genitive case, *Ἀσπιώνου*; the latter in the accusative, *Τουρινόνα*—where it is apparently an adjective agreeing with *Σατράπιαν*. Now whether we agree or disagree with Mr. Court in identifying these words with the present *Usbin* and *Túri* (*Oosbin* and *Toori*) the names of two divisions of the Ghilzye branch of Afghans, (the former to the south of the Kabul river, the latter to the north, both on the upper third of it), we still find the names *Aspii* and *Thyræi* between the Nijrow and the Kuner—names which make it highly probable that the Kapur di Giri inscription stood not only in the Parthian portion of Bactria, but in one of the two satrapies which are specially, and by name, stated to have constituted the detached districts.

So much for the Priyadarsi of the Edicts; or rather of the Priyadarsi of the Kapur di Giri inscription; for it is clear that, admitting the probability of three of the inscriptions having been copies of a single prototype—copies neither necessarily of the same date nor necessarily of different ones—it is in the monument nearest to the Parthian frontier that we most reasonably seek the original. So much, then, for the Priyadarsi of the Kapur di Giri record.

The Priyadarsi of the Lats now comes under notice. He must have advanced beyond the Indus. He must hold not merely that animal life should not be unnecessarily wasted, but he must hold it on grounds that approach the doctrines of Buddhism. Finally, he must have reigned six-and-twenty years—perhaps more; certainly not less. This is because the Kapur di Giri Edicts are promulgated in the twelfth year of his reign; those of the Lats in the twenty-seventh.

Now Phraates the First is not only the only King with a practicable name who was a cotemporary of any monarch named Antiochus, but he is the only such cotemporary who reigned so long as twenty-six years and upwards.

Lastly comes the Priyadarsi of the Bairath inscription. The

Priyadarsi here must be, if not an actual Buddhist, something very like one—something (as must be admitted) a great deal too like for anything corresponding to the ordinary idea of a Parthian.

This contains the germ of an objection. There are, of course, others. In respect to these, I by no means hold it sufficient to show that they are not inseverable. It is better to find them non-existent, than to explain them away, however plausibly. That they can be explained away, I believe; and, believing this, maintain that, whilst they are admitted, they must also be valued. In other words, the improbabilities which they involve must be weighed against the improbabilities of the opposite view. Thus—

In respect to the name, I have remembered that the term *Priyadarsi* is significant in the Indian language; and I have by no means undervalued this fact, as evidence to its bearer having been an Indian. But I have also remembered that *Aornos* is significant in Greek, and that *asparagus*, when converted by a not uncommon catachresis into *sparrow-grass*, makes very good English. Still, *Priyadarsi* is significant in Sanskrit. *Valeat quantum.*

Again, the Antiochus of whom *Priyadarsi* was the cotemporary was the cotemporary of a Ptolemy. There is no difficulty here. All the Antiochi had Ptolemys for cotemporaries.

He was also the cotemporary of an Antigonus and an Alexander. Who these were is uncertain. All that can be said is that they are just as likely to have lived in the times of Antiochus Epiphanes as any other bearer of the name.

With Magas, a fourth cotemporary of *Priyadarsi*, the case is different. The date B.C. 169 leaves the name Magas unexplained. But this is not all. An earlier one explains it. An earlier one gives us Magas a King of Cyrene. A ruler of that name was actually cotemporary with Antiochus the Great. No ruler of that name is known to have been cotemporary with Antiochus Epiphanes—the cotemporary of Phraates I. There may, of course have been such an individual; just as there may have been Antigoni and Alexanders. The absence, however, of the name must be admitted as an exception to our hypothesis. *Valeat quantum.*

Upon the whole however, the coincidences of the date and place of the inscription, with that of the form of the names, satisfy me that the hypothesis under consideration is legitimate—at least in the eyes of those who (like myself) never, except when all other means have been exhausted, refer coincidences to accident.

Having eliminated accident let us see what the hypothesis explains—what it explains when dealing with the monument as one of

Phraates I., pure and simple ; and what as one of Phraates I., a King of Parthia, with Buddhist elements in his creed.

Limited to Phraates I., pure and simple, it accounts for the Arianian character of the Kapur di Giri alphabet ; and it does so in a very remarkable and interesting manner. The date assigned of the accession of Eukratides, viz., B.C. 181, is the exact year assigned by Heeren for the accession of Phraates. Now the coins of Eukratides are well known to be the first on which we find an inscription in Arianian letters ; a coincidence which gives to the first legends of the coins on the parts about Jellalabad the same date, to a King's reign, with the first inscription in the same alphabet, for the same district. Of Phraates I., as a Buddhist, in the full and proper sense of the term, as a Buddhist like the present King of Siam or the Grand Lama of Thibet, there can, of course, be no question whatever. The most that can be said of such Buddhism as a King of Parthia in the second century B.C., could maintain, is that it was something out of which a more developed creed could be evolved, or something differentiated from both Brahminism and Zoroastrianism by certain Buddhist elements. Viewed in this light, and the Parthians being held to be Turanian, the facts connected with the names Sakya, Scythianus, and (perhaps) Budh itself, are accounted for.

So is the apparent abeyance of the Zoroastrian religion between the times of the Achæmenidæ and Sassanians.

So is (in some degree) the final ejection of the Buddhist creed from India ; a creed foreign to the soil, and obnoxious to the reaction of Brahminism.

The more of anything the present hypothesis will explain, the more it will gain in strength. It may, also, gain in strength on other grounds. Any evidence to the existence of a second Magas ; anything definite concerning Antigonus or Alexander ; anything shewing that the Kapur di Giri inscription was older than the other three, would improve it. On the other hand the converse of the latter would detract from it. Evidence that Phraates I. reigned less than twenty-seven years would be fatal. Putting all this together we see that the doctrine under notice is provisional.

And now the first part of my inquiries approaches its termination ; the result being that, word for word Priyadarsi is Phraates, and that in the twelfth year of the reign of Phraates I., there was a Parthian occupancy of the parts about Jellalabad, and in the twenty-seventh year of the same reign a similar occupancy of the districts near Allahabad and elsewhere. The grounds for the conjectural portion of the hypothesis are *historical* ; and they are characterised by being so.

Though the conjecture itself may be wrong, its grounds are historical. The grounds on which the speculations upon what may be called the accessories of the question are based—are traditional, constructive, and what not? For this reason I lay little stress upon the bearing of them either one way or the other; I merely point out certain coincidences, some close, some only approximate; coincidences from which it may be seen that the accessory facts in the history of the opinions concerning Priyadarsi are, at least, as much in favour of the present doctrine as against it.

In the first place, a conquest of Ceylon, concurrent with the dismemberment of Bactria, is indicated in the Priyadarsi inscriptions; where *Tambapanni* (*Taprobane*) specially occurs, as the name of a portion of Priyadarsi's empire. Whether such a conquest must necessarily have been effected by an Indian King rather than by a Parthian (considering the extent of sea-board belonging to the latter) is a question for the reader to consider.

Secondly. The "Ceylonese possess a trustworthy and intelligible chronology beginning with the year 161 B.C." Upon the principle of taking other men's dates, rather than being tempted to tamper with them by making them for myself, I give the preceding statement in the words of Professor Müller; who endorses the view of Turnour. If I agreed with these two scholars I should only do so because their statements favoured my hypothesis: so that (practically speaking) I doubt the fact. The date, however, is remarkable. It lies, as near as may be, half-way between that of the Kapur di Giri monument and the Lats. If the Ceylonese have really a true chronology from the time under notice, a conquest by a King of Parthia is, certainly, a satisfactory way of accounting for it.

Devânâmpriya Tisha, writes Dr. Müller, was a King of Ceylon who made Buddhism the state religion of the island. Surely, word for word, *Devânâmpriya Tisha* is *Devânâmpriyo Priyadarsi*, the King Priyadarsi, Beloved of the Gods of the Priyadarsic Edicts. It requires no skill in the higher branches of emendatory and conjectural criticism to see this. A printer's reader, a printer's compositor, can tell us that if we wish to ensure a clerical error or a misprint, we have only to let one word end with the same letters with which another begins.

Devânâmpriya Tisha "reigned forty years." The numbers are again from Dr. Müller. This is, within three years, the length of the reign of Phraates I. Meanwhile, observe the letter *t*, by which the *d* in Priyadarsi is replaced, and in which we get a sound which brings us one degree nearer to *Phraates*.

Devânâmpriya Tishya was the cotemporary of Asoka, and Asoka, like Devânâmpriya Tishya, was a promulgator of Buddhism. So writes Dr. Müller. But surely Devânâmpriya Tisha *was* Asoka as far, at least, as anything in *rerum naturâ* (especially Priyadarsi) was Asoka.

That Priyadarsi is specially stated in the Mahawanso to be one and the same with Asoka, has long been known; the worth of the statement being unknown. Admit it to be true, and the hypothesis which (word for word) identifies *Priyadarsi* with *Phraates*, identifies (word for word) *Asoka* with *Arsaces*. Instead of "word for word," I might almost say "letter for letter." The omission of *r* is what we expect in the Pali. That the *s* is non-radical is shewn by both the Armenian *Arshag*, and the Greek forms 'Αρσάκην and 'Αρσάκιδαν. It is only the vowel *o* which creates a difficulty.

And now I must remark (though the notice is, perhaps, superfluous) that two identifications like the ones in question prove much more than twice as much as each would prove singly; in other words if the chances are (say) two to one against the similarity of sound between *Phraates* and *Priyadarsi*, and (say) the same against that of *Arsakes* and *Asoka* being accidental, the chances against the associate names *Asoka Priyadarsi* being *Arsakes Phraates* are more than four to one.

How long, however, did Asoka reign? According to one account twenty-six, to another thirty-seven years—the numbers being from Professor Wilson, writing of the northern Buddhists. Now thirty-seven is the exact number given, by Heeren, to Phraates I. From this subtract twelve, and the remainder gives (within a single year) the time between his Edicts and his death.

The identification of Asoka with Arsakes, and Priyadarsi with Phraates accounts for the double names—quite as well, at least, as they are accounted for by the Buddhist incarnations. The Arsakidæ were as individuals, so many *Artabani*, *Phraates*, *Tiridates*, *Mithridates*, or the like. As one of the *Arsacidæ*, however, each was an *Arsaces*.

It accounts for the multiplicity of Asokas. However, much a ruler was an *Artabanus*, a *Phraates*, a *Tiridates*, or a *Mithridates*, he was always an *Arsaces*.

But Asoka was the grandson of Chandragupta who was Sandracottus. Be it so. Those who put this on a level with the synchronisms of the Edicts, and believing in it as a real piece of history, believe also that Priyadarsi was an Indian Prince, are scarcely allowed to interpret the word *grandson* otherwise than strictly. Doing this,

they are also justified in putting the date of Priyadarsi's reign a generation earlier, and making the Antiochus with whom he was cotemporary Antiochus the Great. But let him be a King belonging to a foreign dynasty; yet desirous of being incorporated with the royal line of the country upon which he has introduced himself, and this necessity vanishes, and *grandson* may merely mean *descendant*; the affiliation being fictitious. To this view the historical existence of Bindusara the son of Chandragupta, and the father of Asoka must be sacrificed—or, at least, the exact details of his parentage.

But what if the current details of the important Bindusara be true? In such a case, much of the support which the first part of this paper derives from the second would fall to the ground. At any rate, the doctrine that a Parthian Prince named Asoka was the author of the Priyadarsi Edicts would require resetting. At the present moment I don't pretend to look upon Bindusara as a reality. On the other hand, however, I have no certainty that the evidence of his having been one may not be improved. With this contingency in the background I take leave of the subject. The pure and simple Priyadarsi of the Edicts I hold to have been Phraates I., the evidence upon which this conjecture rests (no matter what be the merits or demerits of the conjecture itself) being both historical and accessible. Such being the case I speak with confidence as to the identification. Whether Asoka be the same I cannot say. The statements which make him so are not only other than historical, but (to a great extent) unknown to me and inaccessible. Out of these that lie before me I know none that is fatal to my hypothesis. On the contrary I can select several which are extremely favourable to it. But I have no warrant that this selection is adequate. There may be more in the background than I can press into my service. To conclude: the Persia of the Achæmenidæ, and the Persia of the Sassanidæ have (each) been carefully studied in respect to their relations to India. In the present paper attention is drawn to the intermediate dynasty of the Arsacidæ. The question, too, as to the religion of the Parthians is suggested.

ART. XII.—*On the Inscriptions found in the region of El-Harra, in the Great Desert South-east and East of the Haurân.* By CYRIL C. GRAHAM.

IN the following pages I propose, first, to give a short account of the locality in which the remarkable inscriptions which accompany this memoir were found, and of the circumstances which led to their discovery, and then to offer a few remarks on the nature of the inscriptions themselves, and of the method I have employed in endeavouring to decipher them.

It will be seen that little else has been done beyond surmising as to the tribe of language to which these inscriptions belong, nor with such very meagre data could we reasonably hope for greater results. If I have succeeded in establishing that these inscriptions are nearly allied to the Himyaritic language, we have already a foundation upon which to build as soon as more specimens of these characters shall reach us.

I had employed the spring and the greater part of the summer of the year 1857 in carefully examining the topography of Palestine. From the accounts I had read in Burckhardt, and especially from the descriptions given to me by the Rev. J. L. Porter, of the remarkable country south of Damascus, called the Haurân, with its numerous cities of stone, I had determined, as soon as the great heats should be passed, to make a journey through that district.

Mr. Porter likewise spoke to me of numerous deserted cities in the plain east of the Haurân, which he had seen in the distance, as Burckhardt and Seetzen had done before him, but which no one had ever visited. The inducement was naturally very great to explore a country so totally unknown, and to attempt a journey which, if successful, must yield so much of interest. The few travellers who had been in the Haurân, had already drawn attention to the high antiquity of the houses and other buildings there, and Mr. Porter in his admirable work,* had stated it as his opinion, and had certainly gone far to prove, that many of the houses which are now standing in the Haurân, were the dwellings of the old inhabitants of Bashan, the ancient Rephaim, who had been conquered by the children of Israel. Many of the cities of the Haurân have names, which we find

* "Five Years in Damascus."

that cities in Bashan bore in the earliest times, and although some might be inclined to doubt the great age of the actual buildings, no one could help being convinced of the antiquity of the cities. What might there not be then in the immense unexplored tract east of Bashan?

Burckhardt too, on reaching the summit of the high chain of mountains which form the eastern limit of the Haurân, had seen some of these cities of the desert, and had felt the strongest desire to visit them. He was, however, unsuccessful, his guides would not venture into the desert for fear of the Arabs, and to his infinite regret he was forced to turn again westwards.

All these accounts conspired to give me a vivid interest in the Haurân, and all that was associated with it, and I determined, unless it were utterly impossible, to explore the desert for some distance east of the mountains of the Drûz Jebel ed-Druz. Immediately before starting on the journey, I made an excursion to the lakes east of Damascus, and to some ruins beyond them. One of the divisions of the great tribe of the Anezi was encamped near the lakes, and some of these Arabs accompanied me in my ride.

From them I made enquiries about the country south-east of us, and from what they told me, vague though their information was, I was convinced that the results of my journey would be valuable.

My first object was to reach a wild volcanic district far east of the Haurân, called es-Safâh. It has been figured in most of the maps, but always incorrectly; Burckhardt and Zimmermann placing it close to the Haurân, and Porter, who removed it out into the desert to nearly its right position, having represented it correctly enough as a volcanic tract, but with this mistake, that instead of a solitary hill, a whole range of hills rises from within the rocky margin. This, however, could not be ascertained without going there, since from the lakes east of Damascus, and from those parts of the Haurân which have been visited by former travellers, only the two highest peaks of the range could be seen, and thus the mistake arose.

On reaching Shubba,* شحبا I consulted with the Drûz sheikh about the best method of performing my journey. He was happily on good terms at the moment, with the tribe of Arabs who, during the rainy season, actually frequented the Safâh. An arrangement

* I must refer the reader who wishes to examine the geography of the Haurân, to Mr. Porter's map in the work before cited, or to the map appended to my memoir in the Journal of the Royal Geographical Society for 1859, or to Kiepert's map of Palestine.

was made with their chief, and I was soon on the way to his tents, which were pitched on the ridge just overhanging the desert. With an escort of this tribe I started on the following day for es-Safâh. Soon after leaving the foot of the mountains, I found the plain, elsewhere so rich and fruitful, covered with innumerable basaltic stones, rounded like boulders as if by the action of water, and well polished, and withal lying so close together that the dromedaries could scarcely make their way across them. This volcanic tract, which extends for nearly five days eastwards, and is in breadth, that is from north to south, of two days' journey, is called by the Arabs el-Hârrah; I journeyed through it almost all night, and on the following day towards two P.M., reached the southernmost point of es-Safâh.

It would be out of place here to give an account of the physical geography of the country; I will only mention that the Safâh is composed of a mass of wild igneous rocks, which rise abruptly out of the plain, and are tossed about and rent in such a manner, that the whole may be best compared to the ruined appearance presented by the moon when viewed through a good telescope.

Out of this rocky district rises a chain of hills called Tellûl es-Safâh, likewise basaltic.

On the eastern edge are five ancient towns, one of them of considerable size, and the more remarkable because a large building of *white* stone is found in it.

The stones are square and beautifully cut, and although the building evidently never was finished, yet its plan is sufficiently distinct to make one believe it was intended for a castle or strong place of defence.

In what age it was built, or by whom, is a mystery to me. It is evidently much more modern than the houses of which the town is composed; these bear the same marks of high antiquity as the old houses of Bashan, and the same massive stone doors are found here that are invariably found in them.

The other four towns are likewise very ancient.

I tried to extract from the Arabs any traditions which might be extant with regard to the white ruin Khirbet el-Bêida, as it is called; but all they could tell me was that a great sultan had once dwelt there, who was rich in camels and flocks, and in herds, and that his daughter, who was more beautiful than the sun, had lived in a palace qasr, some distance to the east of the Safâh. The sultan had been very mighty, and had ruled over the whole country until he was overcome by Tamerlenk, who put him to death and laid waste all the towns about the Safâh.

Riding along the eastern border of es-Safâh, I suddenly noticed a stone lying on the ground which had some marks on it; I looked at it rather carelessly, but soon after, finding another stone similarly marked, I examined it, and immediately discovered that they were distinct characters: I copied them, and looked about anxiously for more.

Presently I found another stone with a palm tree engraved on it, and some characters written below the picture. It was while I was speculating about these marks, that I suddenly came upon the town with the white building. In vain I sought for inscriptions in the town, although I found a well sculptured lion and other objects, not scratched on the stone but in actual relief. From the fact of the inscriptions which I had hitherto found, being always isolated and at regular distances from each other, I at first conceived that I might have before me ancient milestones, and consequently that I might be on the road to some important ancient cities.

The Arabs told me that to the north-east lay a city called Séis, built of red stone. The name sounded almost Egyptian, and I began to speculate whether this might have been a portion of a road between the Red Sea and the Euphrates, made in the time when Egyptians used to go up to Kharkhemish.

The first characters that I copied too, were not unlike Egyptian numerals | ○ • ∪ (, and although I was forced afterwards to give up the idea of any Egyptian origin in these inscriptions, I still think that these stones marked the distance between two cities. I wished much to have visited Séis, but was forced to give it up, in consequence of the report of my scouts that the place was occupied by a division of the Anezi, who have perpetual blood feud with the Arabs of the Safâh. I consequently went more to the east, visited the house where the daughter of the sultan had once dwelt, and then I came upon a place in the desert where *every stone was covered with inscriptions*. I found subsequently several such places, where every stone within a given space bore the mark of some beast or other figure, with an accompanying inscription. Frequently these spots were not near the remains of any town, although in many cases ruins of houses, and in some instances well preserved houses of stone were found near them. Such was the case in the remarkable Wâdi el Warrân, in which I found the curious mace, or idol—or whatever it be intended for,—of red stone, which is in the museum of the Society. Of the inscriptions I copied a great number, some of which are given in the plates at the end of this memoir. I likewise have copied carefully the figures of camels and other representations, in order to shew the style in which they were done. I should remark that I discovered

an ancient road leading directly through el-Hárrah,* and which appears to have been the high way between Basrah† and Tadmor. And now that I have given this account by way of preface, the reader may the more clearly know where es-Safáh and el-Hárrah exactly lie. I will proceed with the enquiry as to what the language may be in which these inscriptions are written, and then consider what method may be employed in order to decipher them.

In the first place, do any of them appear to be bilingual ?

On many of the stones I found certainly two *kinds* of writing, one in which the characters were double, (see the Plates) and the other in which the characters were more slanting and differently formed. I at first thought that these were really two distinct characters, and that such inscriptions might be in two languages, but on carefully comparing them, the double character seems to be the same as the other. It is true that the inscriptions 21 and 31 appear more Semitic than any of the others, and at one time I thought they might be a form of Palmyrene writing; but although some of the characters, as the **J** and the **7** might be supposed to represent the Palmyrene **2** and **3**, yet the others do not in the least agree with the writing of Palmyra.

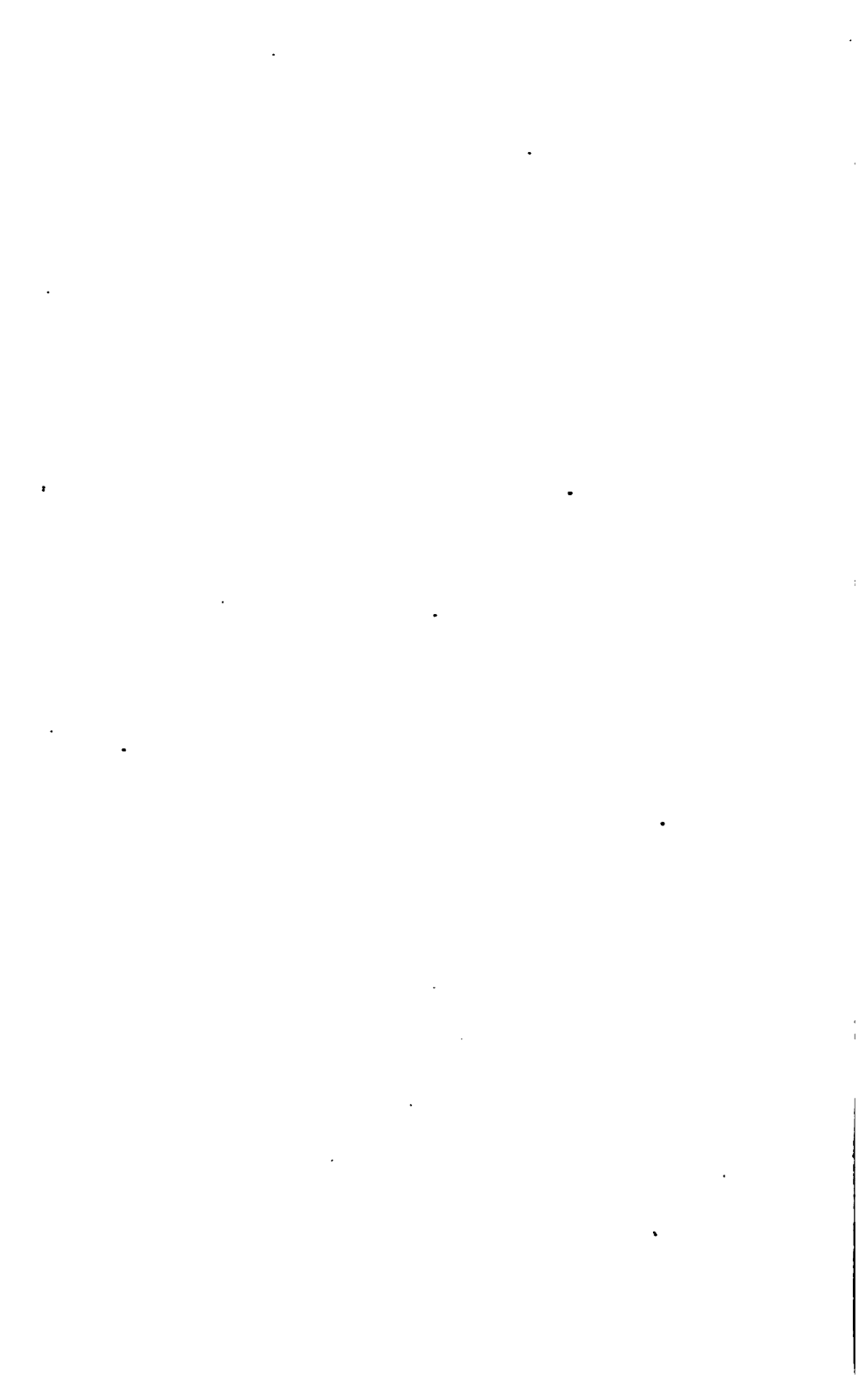
Since we have then no hope of any of the inscriptions being bilingual, what method can be employed in order to decipher this unknown character ? What data have we ?

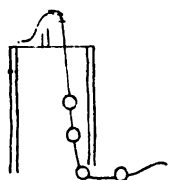
None, I fear, except those afforded by considerations as to the probable history of the country. From Arab writers, as far as I am aware, we seem to know very little of the country east of the Haurán. Abulfeda, who is so very minute in his descriptions of the geography of Syria, deserts us when we go beyond the Castle of Salkhad, nor even in scripture history do we appear to have any notice of this country.

Who then could the people have been who built these cities ? and were the authors of these inscriptions the original settlers or of another race ? I have elsewhere stated, that from the style of the houses and of the towns, I believe them to have been the work of the old Rephaim, who were the founders of the cities of Bashan. But the inscriptions I believe to have been the work of another race, and of a much later

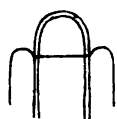
* Written الحرة and es-Safáh الصفاء

† Basrah of the Haurán ; I mean the place written indiscriminately بصره and بسري although the former is no doubt correct, corresponding with the Hebrew בצרה.





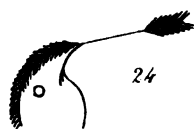
22



ዓጋሽጋፍጋጋ
ሰገዓገዓ

23

ኢ + ጋዐገገዘዐ



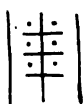
24

1## ሦ ር ፋ ፍ ር
1፻10፻፭፻፬

25

፲፱፻፱፻፲፱፻፲፱
፲፱፻፲፱፻፲፱፻፲፱
፲፱፻፲፱፻፲፱፻፲፱
፲፱፻፲፱፻፲፱፻፲፱

26

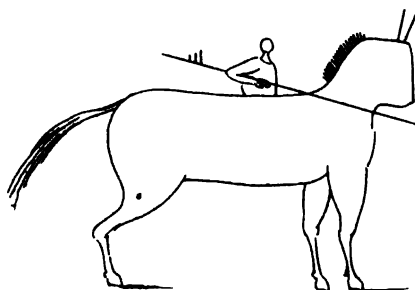


፱፻፲፱፻፲፱፻፲፱፻፲፱



27

፲፱፻፲፱፻፲፱፻፲፱





28

᠑ᠮᠤᠨᠤᠯᠤᠰ

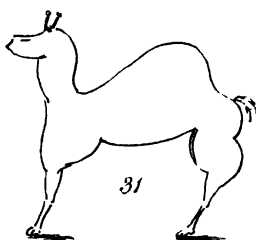


29

᠖ + ᠶᠢᠨᠠᠭᠤᠨ

30

ᠠᠨᠠᠭᠤᠨᠠᠭᠤᠨ
ᠠᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨ



31

ᠠᠨᠠᠭᠤᠨᠠᠭᠤᠨ

32

ᠠᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨ
ᠠᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨ
ᠠᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨᠠᠭᠤᠨ



period. It is remarkable that in the whole of Haurân, where we find the same kind of houses, no inscriptions of a like nature are seen, and therefore, whoever the people were who made them, they confined themselves to the country east of Haurân, and were totally separated from the inhabitants of Bashan. The only sure ground that we have upon which to start is, the high probability that the language is Semitic. We have no instance of any other than a Semitic language occurring in this part of Asia, and unless we ascribe to these writings so high an antiquity, as to suppose them the work of the Rephaim, who most certainly did not speak Semitic, we can hardly entertain the slightest doubt of the tribe of language to which they must belong. Assuming then that they are the characters of a Semitic language, to which of the many dialects included under that head is it most probable that they should belong? When first I laid the inscriptions before the Society, it was surmised that they were a form of the Phœnician, and a very high authority stated it to be his belief that they were the most ancient form of Phœnician writing which we have yet seen; that they might even be the character out of which the older form of Phœnician writing sprung. Now on carefully comparing all the characters with both the older and more recent Phœnician writings, I cannot find above *five signs* which are strictly Phœnician, and out of these, four are common to both the Phœnician and Himyaritic writings. I do not think either that I should have expected *a priori*, to find any direct analogy between the Phœnician and a language which existed (unless we suppose these writings to be the work of pilgrims from a distant part), in a country so many days inland; for, with all their greatness, the Phœnicians were always essentially a maritime nation, and they did not make extensions of their territory eastwards. For some time I was strongly of opinion that they might be of the same class of writing as the well known Sinaitic inscriptions. These, like the ones before us, were constantly accompanied by the rude drawing of some animal, and from the unaccountably irregular manner in which they were scattered about over the whole of el-Hârrah, I was continually reminded of the inscriptions in the Wadis of the peninsula of Sinai. But on comparing the two sets of inscriptions, no analogy sufficiently strong could be traced, to encourage one in the hope that they might be of the same class.

There was however, another language of the Semitic branch, which was spoken in former times by a people of Southern Arabia, who likewise had a character of their own, whose language and writings were still extant in the time of Mohammed. This was the nation of Himyar, and their language was known by the name

Himyarî, and by us called Himyaritic. Its existence was historically known in Europe long before any specimens ever reached us of the writing; the Arab writers repeatedly make mention of the old Himyarî writing and language, especially Makrizi, who, as De Sacy and Rödiger have pointed out, refers to tablets and rocks in different parts, which are engraved with Himyarî characters. It was not, however, until the present century, that any inscriptions in this character were brought to Europe. Niebuhr in the middle of the last century, was the first traveller who perhaps ever saw one, then Seetzen, who in 1810, at Dhafâr, discovered these inscriptions, two of which he copied. But the largest and most valuable, are those which were found in Southern Arabia, by the British expedition sent to make a survey of the coast of Arabia in 1829. At Sana, the capital of Yemen, and at Hisn Ghorâb, north-east of Aden, and at Naqb el Hajar, important inscriptions were found, copies of which were soon placed in the hands of the learned in Europe. Gesenius and Rödiger lost no time in endeavouring to decipher them, and the results of the latter, who pursued the subject farther than Gesenius did, were published in a treatise entitled "*Versuch über die Himyaritischen Schriftmonumente*," Halle, 1841, and developed and appended to his translation of Wellsted's Travels in Arabia, 1842; to both of which works I have been greatly indebted.

The moment I compared my inscriptions with the specimens we have of the Himyaritic, and with the alphabets afforded us by two MSS. in the Royal Library at Berlin, I was struck with the exact resemblance that some of the characters in mine bore to the others, and on examining more minutely, I could not help feeling convinced that the resemblance was not merely accidental. I soon picked out ten signs which were *identical* in the two cases, and after a long and close comparison, I think I can determine the value of six more, that is of sixteen signs in all. Now, I think, if this be once admitted, we cannot but suppose that in these inscriptions east of the Haurân, we have specimens of a writing, which, though not purely Himyaritic, is nevertheless very much allied to it. Hitherto, it is true, the Himyarites have been supposed to be a nation of Southern Arabia, but was Arabia their original country? May not these characters be the more ancient form, out of which the Himyaritic itself sprang? and may we not be guided by this to the fact, that the Himyarites originally came from much further north or north-east, perhaps from the Euphrates or Mesopotamia, and then gradually worked their way down into Central and Southern Arabia? Indeed, after all, it is only the coast country of Arabia that we can

be said to know anything of. How many inscriptions may there not be in the Nejd ? from some reports which have been brought by the Arabs, all about Jebel Shâmmar there are innumerable rock inscriptions, and there are ancient towns in the desert between the Haurân and the Euphrates, where curious writings have been found, copies of which have unfortunately never reached us. There were some inscriptions discovered by the adventurous Wallin, in Belad Sôf, in Central Arabia, two of which I have before me. They were at once acknowledged to be neither Sinaitic, nor purely Himyaritic, and these I find bear a very close resemblance indeed, to the Hârrah inscriptions. Wallin was unfortunately much pressed for time, and was unable, on account of hostile Arab tribes, to copy often, but he says in his memoir, that he found these characters constantly recurring; and when it is considered that he merely took a path directly through Arabia, not deviating to the right or left, we may imagine how much there is yet to be found in those parts.

This convinces me more than ever of the truth of what I said above, viz., that one great race formerly overran all these parts, and eventually settled in Southern Arabia, and formed the dynasties of kings of whom we have more especially heard, under the name of Himyari. From the very close resemblance between the Himyar and old Ethiopic character, we cannot doubt that the origin of the latter was in Arabia; indeed, on the African coast, inscriptions in a character nearly the same as the Himyaritic, have been found. Does not all this too very much strengthen Dr. Barth's views about Semitic immigration into Central Africa? The rock inscriptions about Murzuk, in the country of the Tawârik, had already arrested the attention in 1819 and 1820, of Denham, Oudney, and Clapperton; and Barth was immediately struck on seeing these Hârrah inscriptions, with similarity between them and those of the Tawârik! I have not had an opportunity as yet of seeing any of these Tawârik rock inscriptions, but I hope that those who are interested in oriental palæography, will examine all these writings carefully; it is by comparison alone that we can hope for any results, especially in such a branch of study as philology and ethnology. These may, like the Sinaitic rock scratches, be the work only of ignorant men; they may enumerate a journey undertaken from some religious motive, but even proper names have an inestimable value, and when properly compared, may afford us a clue to much that relates to past history. And how much light may we not have thrown on all these things, when taken in conjunction with the monumental inscriptions of Egypt. I only refer the reader to the great results in the two

admirable works of Brugsch, which are the foundation almost of a new science. He has shewn how much may be made out of names, and in a country where every name is stereotyped. As the fossil bones of old creatures are raked up and examined, and made, under the hand of a Cuvier or an Owen, to tell us of the structure of the whole animal kingdom thousands of years back, so these names may and will tell us of a people long gone by, and guide us to knowledge of a history which was thought to be hopelessly lost. This comparison of names is a new science, and may almost be termed fossil geography.

I will now lay before the reader a list of the particular characters in the Hârrah inscriptions which appear to me to be identical with those in the Himyaritic writings, and assign to them their probable values.

	Hârrah.	Himyaritic.	Hebrew.	Arabic.
1.	𐤀	𐩀	ב	ب
2.	𐤁	𐩁	כ	ك
3.	𐤂	𐩂	ד	ذ
4.	𐤃	𐩃	ע	ع
5.	𐤄	𐩄	ג	ج
6.	𐤅	𐩅	ק	ق
7.	𐤆	𐩆	ע	غ
8.	𐤇	𐩇	ו	و
9.	𐤈	𐩈	ת	ث
10.	𐤉	𐩉	ש	س
11.	𐤊	𐩊	ש	ش
12.	𐤋	𐩋	ת	ث
13.	𐤌	𐩌	ר	ر
14.	𐤍	𐩍	פ	پ
15.	𐤎	𐩎	ח	ح
5a.	𐤏	𐩏	ג	ج
16.	𐤐	𐩐	ד	د

Of these the 𐤃 𐤄 𐤂 𐤅 are common to the Phœnician and Himyaritic alphabets. But there are two letters which are so very marked, and so essentially belonging to the Himyaritic and the allied

Ethiopic character, that they alone would go far to confirm the supposed analogy of these inscriptions with the Himyaritic. They are the K and the H . On the other hand there are $9 = \gamma$ or γ , and $F = \Pi$, $\text{Z} = \text{D}$ or Z which are early Greek or Phœnician signs.

The letter C or D which so frequently occurs, I take to be a Hebrew γ , and to represent the more usual Himyari form J , I , D , and in the inscription at Saha in Abyssinia it really has that form.

Of the remaining letters some of them are remarkable enough, but have neither a Phœnician nor Himyaritic appearance. There is one L , which occurs very frequently, and I know it as otherwise occurring only in the Runic alphabet. The \bullet which so frequently occurs, I suppose to mark the division between words as the I does in Himyaritic. The sign 9 is likewise similar to the $9 = \gamma$ of the Sinaitic, and the F resembles the Sinaitic $\text{F} = \psi$. Still a great number remain unexplained, but it must be clear how very distant the claim of the Phœnician and Sinaitic characters is to any similarity with these inscriptions found with the close resemblance between these and the Himyari. The richness of the alphabet seems very astonishing. I have counted certainly fifty distinct signs. The inscriptions were so well cut into the hard basalt that every mark was perfectly clear, and the copies which were taken may be relied upon.

We have, however, not nearly enough of them yet to encourage us in setting about reading them. The inscriptions, too, are very short, containing doubtless little more than a proper name, and thus leading one to suppose that this must all have been holy ground. On the supposition that these words celebrate pilgrimages, some leading expressions should be sought for, such as $\text{בן, שלם, זאד, זיר, בלד}$ or בן, זלם, זאד , &c.













I will now go rapidly through the inscriptions themselves.


- (1) is very remarkable, and the same group occurs over and over again in El-Harrâh. I copied it three times.
- In (15) we have one of the hunting dogs of the Arabs called "Sillijah."
- (16). A well executed monkey. It is to be remarked that he is tied round the neck and round the loins, and therefore probably a pet animal, or one that has been brought from another country as a tribute.

- (19). Occurred very often ; but I cannot conceive what it is intended to represent.
- (22). Is probably a well and a man at the top hauling up the bucket, and
- (26). Reminds one of the mystic tree in the Nineveh sculptures.

I had written this short account of the Hârrah inscriptions last year, and had dispatched a copy from Thebes for publication. Unfortunately the despatch never came to hand, and thus a whole year of delay has occurred in publishing it. Since I wrote this my attention has been drawn to other things, and having been continually in Egypt, I have not heard if anything further has been done with regard to the deciphering of these inscriptions in Germany. I have, however, a few more remarks to make in connection with this subject. 1. Professor Lepsius has called my attention to a very curious inscription which I had overlooked, and which had been copied by Wellsted in the *Wâdi el Maye* nearly opposite the Qoseir. I see that Rödiger only just mentions it. It is the only one of the kind Wellsted found, and is itself too short, without any other assistance, to be read. It also is evidently allied to the Himyaritic, but it contains many characters which do not belong to that alphabet. Some of the most remarkable signs in the Hârrah inscriptions are found in this one, and it likewise resembles these in the astonishing number of apparently distinct characters which it contains. In that short inscription, which can, at most, contain a dozen words, there are more signs than would make a whole alphabet. This again, one might suppose, would be identical with the Wallin inscriptions, but it is not.

The following are the signs which are most similar to each other in the Hârrah and the Wâdi il Maye inscriptions :

Hârrah.	Wâdi el Maye.
	
	
	
	
	
	

There is also the sign  which constantly occurs in all the Hârrah inscriptions, and elsewhere I find it only in the Etruscan, nor is

this perhaps so surprising after the late researches of Professor Stickel.¹

2. There has been a report that inscriptions very similar to those in the Peninsula of Sinai are found in the cataract country of the Nile, especially in the quarries near Asuân. This is decidedly an error. I carefully examined every Wâdi last winter, and had such inscriptions existed they could not have escaped me. I found very great numbers of inscriptions in the Egyptian *Demotic* character, which most probably have given rise to the mistake. Also on the leg of one of the colossi at Abusimbel in Nubia I found, among the inscriptions in so many languages which commemorate the visits of travellers from the Pharaonic times down to yesterday, one remarkable inscription in a character with which I was not acquainted, but which most nearly resembles the old Ethiopic. At the same spot are some curious Phœnician inscriptions, some of the characters in which differ from any I have hitherto seen, although they most nearly approach to the Punic form of writing. In the course of next year I hope to again visit the Haurân, and thence to penetrate into Central Arabia and the Jebel Shammar. The results of such a journey cannot but be of great value, and must throw light on the subject I have been considering.

CAIRO, *September 23rd*, 1859.

¹ "Das Etruskische als semitische Sprache." Leipzig, 1858.

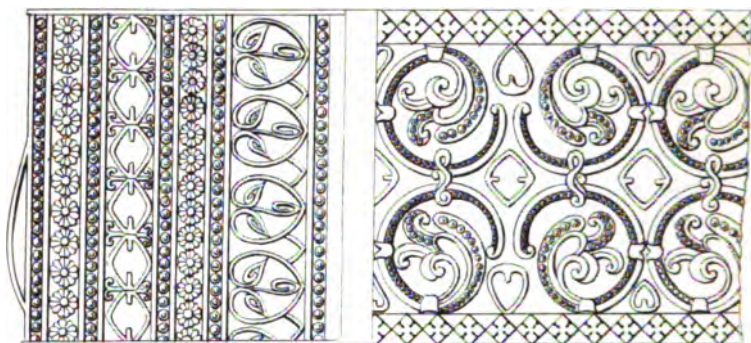
The works referred to in this memoir, and which the reader may find it interesting to consult, are Rödiger "Versuch über die Himyaritischen Schriftmonumente," Halle, 1841. Wellsted "Travels in Arabia," translated by Rödiger, with an essay on the Himyari language. Tuch "Sinaitische Inschriften," in the *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Dritter Band; Heft ii., part 1, 1849. *Sinaitic Inscriptions*, published by the Royal Society of Literature, vol. ii., part 1, 1832. Gesenius "Phönizien." Ewald "Über die Grosse Phönizische Inschrift von Sidon, &c.," Göttingen, 1856. "Five Years in Damascus," by Rev. J. L. Porter. "Travels in Syria," Burckhardt. Seetzen's Travels. Wallin's route in Arabia, in the *Journal of Royal Geographical Society*, vol. xx., part 2, 1851; and my own Memoir of my Travels East of the Haurân in the vol. for 1859.

ART. XIII.--*Account of some Golden Relics discovered at Rangoon, and exhibited at a Meeting of the Society on the 6th June, 1857, by permission of the Court of Directors of the East India Company.* By COLONEL SYKES, F.R.S., M.P.

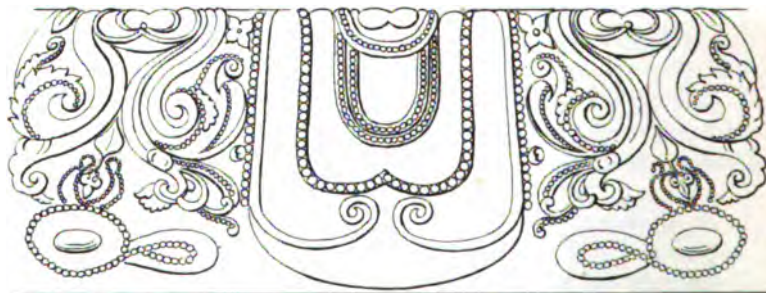
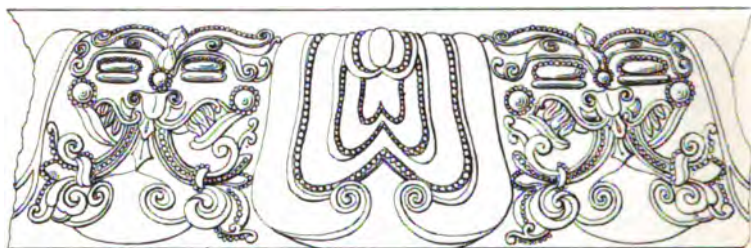
INTRODUCTORY NOTE. •

ON the 10th May, 1855, Brigadier C. Russell, Commanding at Rangoon, reported to Captain Thomson, the Assistant Adjutant-General of the Pegu Division, for the information of Major-General Sir S. W. Steel, K.C.B., Commanding the Division, that on the 13th April, 1855, some labourers employed at Rangoon in levelling a Buddhist temple for the future site of European barracks, had met with the gold relics enumerated in Brigadier Russell's letter. They, no doubt, had been placed under the floor of the temple, as was the practice in the Stupas, in the Punjab, in Afghanistan, at Sarnath, and elsewhere. The relics were transmitted to the Government of India, and subsequently forwarded to the Court of Directors of the East India Company. I was Chairman of the Court at the time, and deeming the relics and the circumstances of their discovery of sufficient interest to be made publicly known, I obtained the sanction of the Court for their exhibition at a meeting of the Royal Asiatic Society, and for the publication of the documents accompanying them. The articles are in pure massive gold, and the helmet and belt (sword) are set with precious stones. The three principal objects are what Major-General Russell calls Pagodas of three sizes, but they have the form of Chaityas, or relic tombs; which tomb is met with as the chief object in the Buddhist cave temples throughout India, and of which so many miniature forms were found in the ruins of Sarnath, and of which I gave an account to the Society in February, 1853.

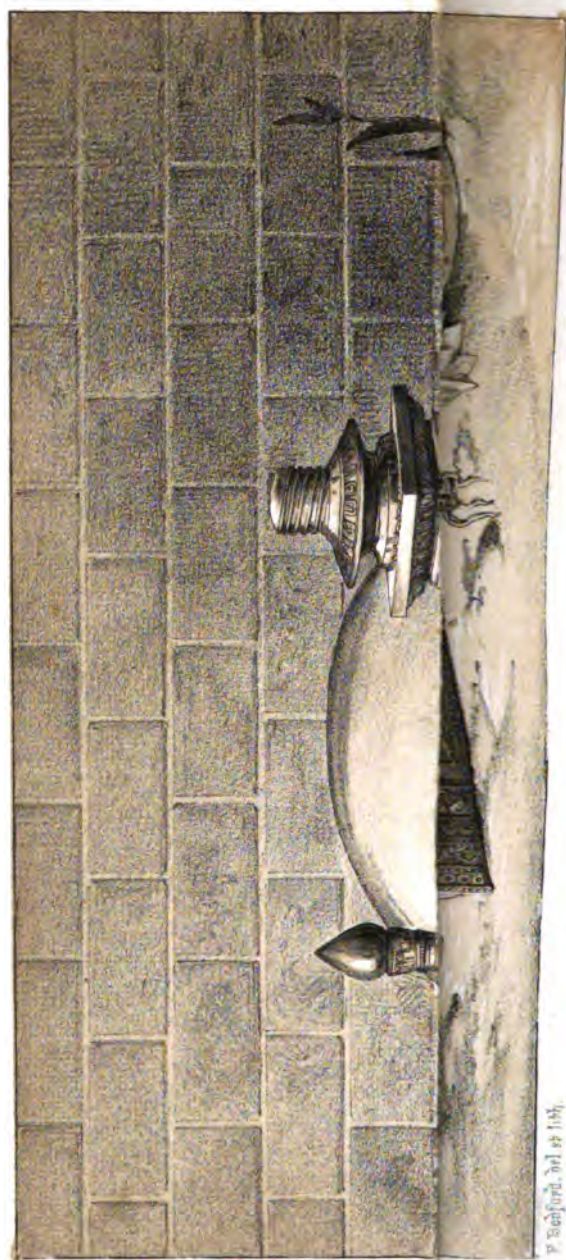
The meaning of the word Chaitya is "*the receptacle or holding place of a sacred relic*." Anciently it was a hair, a tooth, or a particle of the burnt bones of Buddha, or of the Bodhisatwas: at Sarnath it was the sacred dogma "*Ye Dhammá*," &c., stamped upon the bottom of the Chaitya; and at Rangoon we find it



DETAIL OF THE END OF GIRDLE.
FULL SIZE.



BASE ORNAMENT OF THE GREATER PAGODA.
FULL SIZE.



P. Bedford. del. et lith.

GENERAL VIEW OF THE RELICS.

holding the burnt bones of a human being; but whether of Prince or Princess the translators of this inscription are not agreed upon. But there were *three* Chaityas, and this would imply that there were three sacred objects to be inclosed. One might be for the burnt bones; another for the devoted tresses of the Princess; but a relic is wanted for the third. Captain Sparks, who signs his lingual labour "A true translation," represents the Queen of Pegu as the pious "devotee;" Mr. Fau-böll, who reads the Pali text differently, makes the Prince the "devotee;" but the probabilities, setting aside the conflicting translations, would favor the supposition that the relics (burnt bones) were those of a man; for the ashes of a female would scarcely have been associated with a martial jewelled gold *helmet* and *sir-pesh*, and a jewelled gold *sword belt*. At the present time we are only entitled to assume that the cremated bones, whether of male or female, were, at all events, enshrined by some one in authority, of unbounded wealth, and measureless piety.

W. H. SYKES.

8th November, 1859.

Extract of a letter from Brigadier Russell, Commanding at Rangoon, dated 10th May, 1855, addressed to Captain Thomson, Pegu Division.

SIR,

I HAVE the honor to state that on the 13th ult., the articles enumerated in the margin,* were found by some Coolies while employed in levelling one of the pagodas on the Eastern heights (the site of the new European Barracks), and to request that you will bring the same to the notice of Major-General Sir S. W. Steel, K.C.B., Commanding the Division, and to convey to me his orders regarding the disposal of the articles in question. * * *

I beg to forward a copy of the translation of the inscription on the golden scroll found among the articles above enumerated.

I have the honor, &c.,
(Signed) C. RUSSELL.

* Model of a gold pagoda in three pieces, a larger ditto in four pieces, smaller ditto in three pieces (imperfect), gold helmet, set in jewels (broken), gold tassel, gold leaf scroll, small gold cup with ruby on top, gold belt set with jewels, gold bowl with cover.

Copy of Translation by Captain Sparks.

The Queen of Pegu, placing her trust in the three gems¹, and hoping for release from the state of transmigration, and looking for Nibban², through the merit of these, her good works, has made the following offerings :—

1. In the year 846 (A.D. 1484-5) the King and I built a pagoda.
2. I entertained eight priests.
3. I defrayed the expenses of ordaining two novices (priests).
4. I defrayed the expenses of ordaining seven novices (priests).
5. I defrayed the expenses of ordaining eight novices (priests).
6. I offered eight images of Gaudama.
7. I redeemed 250 slaves, and caused them to be ordained priests.
8. I offered seven images of Gaudama.
9. I released eight criminals from jail, and made them priests.
10. I cut off my hair, and offered it as a burnt offering³.
11. I built 26 monasteries, and 60 out-houses for the use of the priests.
12. I redeemed 100 male slaves, and attached them to the service of the pagoda which the King and I had erected.
13. I offered 8 gold chains, 7 gold chains studded with rubies, a gold head dress, studded with rubies, value 300 tickals ;
a ⁴ studded with pearls, value 2,000 tickals ; a
girdle studded with the same kind of gems ; and 2
 ⁴ value 5,200 tickals, fit to be worn by the sons
and daughters of the Nâts⁵.
14. I offered 3,000 tickals of silver.
15. I offered to the priests a highly ornamental couch, value 300 tickals.
16. I made a solemn engagement to cause to be conveyed every day to the monastery food for 28 priests, and to provide food every day for the same number at the palace ; I also, besides this, distributed food daily to 100 priests.
17. I offered 100 best umbrellas, and a white umbrella ; also 500 sets of the eight articles which every priest must possess⁶.
18. I offered rice, clothes, and a copy of the scriptures.

These offerings I have made in the hope that in future transmigrations, I may be born again a royal personage, that I may see and know the three gems, and appear before the glory of the presence of God; that, as in time past, I have placed my trust in the excellent God, so in all time to come I may do that which is good, be delivered from all evil, and be preserved from all intercourse or communion with wicked and evil disposed men.

A true translation.

(Signed)

T. S. SPARKS.

Rangoon, 9th May, 1855.

NOTES.

¹ The "three gems," are God, the law, and the priesthood.

² Nibban, the highest state of happiness to which a Buddhist looks forward, commonly called "annihilation," but apparently meaning an existence without sensation, if such were possible.

³ The Queen cut off and burnt her long hair, as a sign that she abandoned the pomps and vanities of the world,—another ceremony of which Buddhism has so many common to the Romish Church.

⁴ These blanks represents two Pali words, of which no one can give any translation, or explanation.

⁵ The "Nâts" are supernatural beings of the same order as gins, fairies, hemadryads, &c.

⁶ The eight articles which every priest must possess, are, a fan, a wallet to hold the offerings of food, &c., a water-strainer, a yellow robe, an umbrella, a small axe, a water-cup, and a skin to spread before him when praying.

The white umbrella is to be placed over the figure of Gaudama, where alone it can be placed, except over the King.

N.B.—Neither the name of the King nor Queen is given in the inscription. A reference to the Ta-laing history shews that in the year 846, Pyinya Kyaula was King of Pegu; which of his many Queens made those offerings there is no possibility of ascertaining.

(Signed)

T. S. SPARKS.

The Inscription on the Gold Band is in metre ; a Transcript follows in the Roman character ; and another translation, accompanied by philological Notes, has been kindly communicated by V. Fausbøll, Esq., the Editor and Translator of the Pali book *Dhammapadam*, published at Copenhagen in 1855.

NAMO BUDDHÁYA |

- 1 Vanditwá ratanattayam khilamabísámissaren'uttamam |
Setebhissarasúnuná kupatiná saddhádayásobhiná ||
- 2 Sabbañúvarasásanabbu javanádichcheua saddháya' aham |
Puñam yam nijadeviyá saha katam vakkhámi tam nimmalam ||
- 3 Saddho sakim pabbaji rájarájá dwikkhattum ev'uttamarájadeví |
Nirámisá bhunjiya te ubho pi rakkhimsu sílam paramam
visuddham ||
- 4 Pabbájes' attano seṭṭhā chatasso dhítaro subhá |
Sabbarájissaro rájá ratanattayamámako ||
- 5 Pañāsa dwisate dāsopasampādesi buddhimá |
Mochetwá sabbarájindo sattumátangakesari ||
- 6 Sāggam gatāya saddháya yuttāya rájadeviyá |
Pattini datwá pabbajitá janá añe pi tattaká ||
- 7 Saddhasaddho mahátejo rájindo dipaduttamam |
Ujjáletw' agginá kese panchakkhattum bhipájayi ||
- 8 Saṭṭhi kuṭi surammá cha vihará cha chhavisati |
Chatasso baddhasimá cha nava thúpá cha káritá ||
- 9 Dinná sata gharádásá suvaññáu' atṭha sattati |
Tisata dwisahassáni panchasatáni rúpiyá ||
- 10 Kamsáni dwisata panchasahassagananáni cha |
Tisahassamsukan dinnam maricham tisatambanam ||
- 11 Padinná nichchabhāttattham pathaví satarajjúká |
Pañāsakasatam nichchabhāttam gehamhi páchitam ||
- 12 Sachhattagáhakam setachchhattam cha sobhanam satam |
Dinnam pauchasatá atṭhaparikkhará munárahá ||
- 13 Dhaññakosam vivaritwá nágarānam visajjanam |
Dinnam katá kammaváchá hemasambumayá duve ||
- 14 Puñam tam evarúpam kupati patikaram so bhipattheti evam |
Puñenānena so 'ham atuladasabalo nágataasmim bhaveyyam ||
- 15 Buddhó yāvab bhavissam paramasirimatí rájadeví va táva |
Deví me hotu má me bhavatu bhavabhavé idiso vippayogo ||

1 တေဟိယာယုနု
 ပဟံပုသံယံ နိဇဒေဝိယာယဟကတံ
 နဇဒေဝိရိတမိသုသုပိယတေဉ္စ
 2 နိရုသဗြာဓိယဘောဇာ
 မောဓောဓောသဗြာဓိဗြာ
 နာပဋ္ဌိဒေဝ ပဗြဇိတဇာ
 3 နတုဂ္ဂိဗုဏေယ ပဗုဏ္ဍိ
 နတုဗုဏ္ဍိ မာဓိဗုဏ္ဍိ ပါသကာဓာ
 နိပဗ္ဗာသတု
 4 မာဓိဗုဏ္ဍိ
 နိပဗ္ဗာသတု
 နိပဗ္ဗာသတု
 5 မာဓိဗုဏ္ဍိ
 နိပဗ္ဗာသတု
 နိပဗ္ဗာသတု
 6 မာဓိဗုဏ္ဍိ
 နိပဗ္ဗာသတု

Mr. Fausbøll's Translation of the Inscription on the Gold Band.

1. Having bowed down to the Three Gems, that good (work which has been performed) by the Ruler of the Lords of the whole World, the son of Setebhissara, the Prince shining with faith and mercy, the fleet Sun.

2. That meritorious, spotless (work) done in conjunction with his Queen, will I, who am steadfast in the excellent commandments of the All-knowing, faithfully relate.

3. The King of Kings, endowed with faith, assumed the monkish habit once, the exalted Queen twice ; living without desire, they both maintained pure lofty virtue.

4. The King, Ruler of all Kings, anxious for the Three Gems, caused his excellent four beautiful daughters to enter the monastic life.

5. The wise Lord of all Kings, a lion towards hostile barbarians, having liberated 250 slaves, had them ordained priests.

6. When the faith-endowed Queen had gone to heaven, after conferring blessings, a like number of persons entered the religious life.

7. The most faithful, glorious Lord of Kings having burnt on the pyre the most exalted of human beings, he made *pújá* to her hair five times.

8. Sixty fair cottages, and twenty-six *vihāras*, four ramparts, and nine *stūpas* were erected (by him).

9. A hundred domestic slaves, seventy-eight suvannas, two thousand three hundred (and) five hundred rupees were granted (by him).

10. Two hundred kansas (goblets), and five thousand *gananas*, three thousand *sukas* were granted, and also three hundred *ambanas* of pepper.

11. A piece of land comprising one hundred fields was given for continued maintenance ; one hundred and fifty daily meals were dressed (by him) in his house.

12. Also a hundred splendid (gold) handled white umbrellas, were offered (by him), and five hundred sets of eight articles required for monks.

13. Having opened his granaries, gifts were given to the citizens, and two gold covered *kammavachas* were provided (by him).

14. That Prince thus expresses his desire that such a good work should be rewarded : "For this good work may I be hereafter an incomparable Buddha ;"

15. "And while I am an incomparable Buddha may the most excellent and glorious Queen be my wife, may there not be such a separation for me in the worlds to come."

NOTES.

The metre of the first two *slokas* is *Sārdūlavikrīḍita*; of the third, *Triṣṭubh*; of those from the fourth to the fourteenth, *Anuṣṭubh*; and of the last two, *Sragdharā*. It must be observed that *sabbaññū*, *puñña*, *pañña*, *añe*, *dhañña*, are to be read as if written *sabbaññū*, &c., as may be seen from the commencing feet of the first and fifteenth *slokas*.

Namo Buddhāya is a modern abbreviation used instead of the ancient Formula "*Namo tassa bhagavato arahato sammāsambuddhassa*," with which all sacred writings commence.

V. 1. *Ratanattayam* is also a shorter expression which supplies the place of one or more verses in which the authors of Buddhistical Commentaries usually express their praise of Buddha, Dhamma, and Samgha: see "Westergaard, Codices Orientales," vol. i, pp. 206, 356, and 44 A. *Khila*, according to the Amarakosha, B. II, ch. 1, v. 5, = *sama*; and *sama* = *sarva*, *viśva*, &c., B. III, ch. 2, v. 14; the usual form is, as is well known, *akhila*,—probably a barbarous (non-Sanskritic) word. *Sāmissara*, a compound (Sanskrit, *śvāmīn* and *īśvara*) synonymous with *rājardjan*, v. 3; *rājissara*, v. 4; *rājindo*, v. 5 and 7. *Kupati* must have the same meaning as *bhūpati*; *Ku* means 'earth'; see Wilson's Dict., the "Amarakosha," and Clough's "Pali Vocabulary," p. 21. It is curious that we do not find the name of the prince, but only that of his father: either the king was very modest, or the writer of the inscription very awkward. *Saddhā* (cf. *saddho*, v. 3; *suddhāya*, v. 2 and 6; *saddhasaddho*, v. 7) is named with the same emphasis in the Buddhist sacred writings as *πῶτις* in the New Testament; see the "Dhammapadam," vv. 8, 144, 249, 303, 333.

V. 2. The syllable made *bū* in the transcription is much effaced on the band. If it could be read *ttho*, or in some other way with a like meaning, I should consider *Sabbaññūvarasāsanatttho* as an adjective belonging to *aham* = 'I who am steadfast in the excellent commandments of the Omniscient.' The construction of the first two *slokas* is: *yam uttamam puññam nijadeviyā saha katam khilama-hisāmissarena* etc. *tam nimmalam ayam sabbaññūvarasāsanatttho saddhāya vakkhāmi*.

V. 3. *Sakim*, once, = Sanskrit, *sakṛt*. *Pabbajjī*, aorist of *vaj*. Compare Crawford's "Journal of an Embassy to Siam," second edition, vol. ii, p. 68: "Every male in the kingdom must, at one period or another of his life, enter the priesthood, for however short a time. *Even the King will be a priest for two or three days*, going about for alms, like the rest, and the highest officers of the government will continue in the priesthood for some months." *Pabbajj* (Sansk. *pravraj*)

properly means, 'to go away,' therefore, 'to leave the society of men, and become an ascetic.' *Dwikkhattum*, twice; cf. v. 7, *panchakkhattum*, five times; the Sanskrit termination *kṛtvā* becoming *kkhattum*. *Nirāmisā*, cf. *vantalokāmisā*, *Dhammapadam*, v. 378; *āmisā* = desire; see Haughton's "Beng. Dict." In Wilson's Dict. I find *nīrāmisāsin*, 'free from sensual desires.' *Bhuñjiya*, gerund of *bhuñj*, = the usual *bhuñjitvā*. The ordinary formation of the gerund in Pali is by *tva*, when the verb is compound. *Bhuñj*, I suppose must here be taken, not in the meaning of 'to eat,' but in a more general sense, 'to enjoy life,' 'to live.' *Sīla* occurs in the *Dhammapadam* still oftener than *saddhā*, see vv. 10, 55, 57, 84, 110, 144, 208, 217, 229, 271, 289, 303, 400. *Rakkhimsu*, aorist of *rakkh* = sans *raksh*.

V. 4. *Pabbājes* instead of *pabbājesi*, aorist of *pabbaj* in the causative, *i* being elided before the following *a*: cf. the note to *Dhammapadam*, v. 5. In the same way we read in *Nimijātaka* :—

Tassa puṭṭho vyākāsi

Mātali devasdrathi

Wipākam pāpakammānam

Jānam akkhās ajānato (i. e. *akkhāsi*).

Dhītarō, according to La Loubère ("Du Royaume de Siam," Amsterdam, 1691, vol. i, p. 342) and Crawford ("Embassy to Siam," vol. i, p. 80), there are no monastic institutions appropriated to females, and only aged women are permitted to retire to the monasteries. A different custom must have prevailed, I think, in Pegu, as the King sent his four beautiful daughters to the cloister.

V. 5. *Dāsopasampādesi*, contracted from *dāse upas*: such a contraction is not used in the *Dhammapadam*, cf. the note to v. 307. For *upasampaddā*, see Hardy's "Eastern Monachism," p. 44. "It is not unusual for a noble, as a work of pre-eminent excellence, to emancipate a slave, that he may become a Bonze." See "The Kingdom and People of Siam," by Sir John Bowring, vol. i, p. 297. *Sattumātanga-gakesari*: *Mātanga* means, not only an elephant, but also an outcast (Clough's "Pali Vocab.," p. 134, 67), and, according to Clough's "Singhalese Dictionary," generally 'a mountaineer,' 'a barbarian.'

V. 6. *Patti*. I have followed Turnour in rendering this word 'blessing,' see 'Mahāwanso,' 4to., p. 207, 89, but confess I do not see upon what this translation is grounded; the word can hardly have any other Sanscrit equivalent than *prāpti*.

V. 7. *Dipaduttama*, is to be found in the "Pali Vocabulary," p. 1, as a name of Buddha, but it refers here to the Queen.

V. 8. *Kuṭi* ("Pali Vocabulary," p. 25, 10), either the temporary huts in which the monks, down to the end of the 17th century, passed

twenty days in severe meditation and prayer, (see "Crawford's Embassy," vol. i, p. 79), or the cells which belong to every monastery. See the plan of a monastery which La Loubère gives in the first volume of his book, p. 341. The defective word... *tasso* can scarcely be completed in any other way than *chatasso*.

V. 9. *Ghard* is here a feminine, whereas it is stated in the commentary on the *Dhammapadam*, v. 302, that it is a masculine; and according to the "Pali Vocabulary," p. 25, 9, a neuter. It means 'a house,' and is derived, no doubt, from the same root as *grha* and *āgrā*, cf. Carey's "Bengali Dictionary." Temple-slaves are often spoken of by La Loubère and Crawford. *Suvannā* and *rūpiyā*, are gold and silver coins.

V. 10. *Kamsa* = Sanskrit *kāmsya*; which, according to Wilson, means 'a goblet,' 'a musical instrument,' 'a measure.' It must be taken here, I think, in the first signification. *Ganana*, I think, must be that calculating instrument, the *swanpan*, which is described and figured by La Loubère (vol. ii, p. 102), and of which many have been brought to this country. *Suka* = Sanskrit, *śuka*, which according to Wilson may mean 'clothes,' 'a turban,' 'a helmet.' *Maricha* may be 'pepper,' with which the country abounds. *Tisatambana* I could divide into *tisata* and *ambana*: the last word being, probably, equivalent to *ammana*; see "Pali Vocabulary," p. 132, 54.

V. 11. *Rajjuka* implies, I think, the same as the Sanskrit *rājikā*, 'a field' (see Wilson). *Nichcha...tam*, we may read *Nichchabhattam*, or *Nichchambhattam*, taking *Nichcham* as an adverb; *bhatta*, Sans. *bhaktā*. "Three hundred Phra [priests] receive daily their alms from the hands of the king; and this alms-giving is, in the minds of the Siamese, a merit of high order, entitling them to expect recompense in the next stage of their existence."—Sir John Bowring, as before.

V. 12. *Aṭṭha parikkhārā*, cf. Hardy's "Eastern Monachism," p. 64. *Mundāraha*, composed of *muni* and *araha*, the *a* being prolonged for the sake of the metre.

V. 13. *Dhañña*, Sansk. *dhānya*, "Pali Vocabulary," p. 130, 29, a sort of superior rice in the husk, and other grains. *Nagara...m...ijanam*, I read *nāgarānam visajjanam*; properly it should be *visajjanam*, see "Pali Vocabulary," p. 54, 13, and the note to the *Dhammapadam*, v. 140, but the metre requires a short syllable.

Kammavāchā hemasambumayā duve. The *Kammavāchā* is the collection of Buddhist rituals which is frequently seen in the libraries of Europe, usually written, or rather painted, in the square Pali character, on gilt or silvered palm-leaves. There are some leaves of this work in the Society's library written on sheets of copper, and one

is formed of varnished cloth, inlaid on both sides with letters of mother-of-pearl. In the Egerton Collection, No. 764, in the British Museum, there is a copy of the Dhammachakkappavattanasutta and the Chúlakammavibhangasutta in one volume, carved on 25 silver leaves, and furnished with massive gold covers; this was purchased at the price of 45*l*. The text mentions the donation of such a costly work, as a meritorious act of the King. *Sambu* here signifies the covers of a book; conf. the Sanskrit *sambu*, a bivalve shell (Wilson).

V. 14. *Patikaram* must be a mistake of the artist for *patikatam*, 'returned;' 'rewarded.' *Bhipattheti*, Sansk. *abhiprārthayati*. From the use of the present tense we must infer that the King was still alive, and that the inscription was written at his command; we should otherwise have expected the aorist *abhipatthesi*. *Das...lo* can scarcely be read in any other way than *dasabalo*, Sansk. *dasabalah*, 'who has the strength of ten,'—a very common name in Pali literature for a Buddha, which latter word is used in the next verse as synonymous with the corrupted one of the former verse. *Nāgatasmin bhawe*, 'in the existence not yet come,' i.e., the future; *nāgata*, compound of *na āgata*, instead of the more common form *anāgata*.

V. 15. *Yāvab bhavissam*, the author of the inscription has retained the old form *yāvad*, which is found in poetry, as in the Dhammapadam, v. 72, *yāvad eva*; but *d* before *bh*, must in Pali become *b*, as for instance the Sanskrit word *adbhuta* becomes *abbhuta*; usually the Sanskrit *yāvat* becomes *yāva* in Pali, sometimes *yāvam*; see the "Dhammapadam," v. 284.

It is singular that the name of the king who is the subject of the inscription is not given; he is called merely the son of *Setebhissara*,—no more. I have sought in vain for a king of that name, which does not appear to be recorded. It seems to be not an improbable conjecture that we have here a monument of the celebrated *Alompra*; although there is nothing in the inscription which directly affirms it. We are told of the Burmese monarch 1st. "that he was of low extraction (Symes's "Embassy to Ava," 2nd ed., vol. i, p. 13), and first known by the humble name of *Aumdzee* (which signifies 'a huntsman'), previously to his revolt against Pegu and his assumption of sovereignty over the whole country, and "he was a man who suffered no time to elapse in inaction;" (Symes i, p. 34). 2ndly. that he laid the foundation of *Rangoon*, or *Dzangoon*, which signifies 'victory achieved' (Symes, p. 52), and 3rdly, that his adopted name, *Alompra* (more correctly written *Alaoughbura*), is applied to one destined, in Burman belief, to become a *Buddha*, the meaning of which is, in fact, that the conqueror bestowed upon himself a species of apotheosis

(Crawfurd's "Embassy to Ava," vol. ii, p. 281, 2nd ed.) There is something in accordance with this in the inscription. 1st. Being a man of low birth, his father's name would not, of course, be found among those of the kings. The king of the inscription is called *Javandichcha* 'the fleet sun' and *Sattumdtangakesari*, 'a lion to the hostile barbarians;' titles very suitable to a resolute soldier and powerful conqueror like *Alompra*. 2ndly. The gold band on which the inscription is written was found by digging among the ruins of the famous temple of Rangoon, which was, in all probability, coeval with the town built by *Alompra* in 1753. 3rdly, the wish expressed in the concluding *sloka*s, that he may become a Buddha in a future state of existence, accords well with what is recorded of *Alompra*; and this is confirmed by the statue from the great pagoda of Rangoon, which is supposed to represent *Alompra*, who is standing in a meditative position (see Crawfurd, vol. ii). If the inference we might draw from the above statements be correct, the inscription must date from a century ago. It cannot be old, because the characters do not differ much from those now in use among the Burmese.

Possibly *Setebhissara* may not be a proper name, but may signify merely 'the ruler of the Setebha.'

In conclusion we may observe that it is not uninteresting to see how all the *terms* of the inscription are thoroughly in accordance with those used in the sacred writings of Buddhism; and to find that the *meritorious works* mentioned are of the same kind, as those which are given in the modern accounts of the Buddhist countries

ART. XIV.—*On the Indian Embassy to Augustus.* By OSMOND
DE BEAUVOIR PRIAULX, Esq.

[Read 19th November, 1859.]

NICOLAUS DAMASCENUS, in a fragment preserved by Strabo,¹ relates “that at Antioch Epidaphne, he fell in with three Indian ambassadors, then on their way to the court of Augustus. They were, as their letter showed, the survivors of a larger embassy, but to the others the length of the journey principally had proved fatal.² Their letter was written on parchment (*διφθερα*)* and in the name of Porus, and in Greek. It set forth that Porus, though Lord over 600 kings, much valued the friendship of, and was ready to open his dominions to, Cæsar, and to assist him on all just and lawful occasions.³ The presents they brought with them were in the charge of eight well-anointed slaves, naked all but their girdles, and consisted of a youth whose arms had been amputated at the shoulders in childhood, a sort of Hermes, some large vipers, a snake ten cubits long, a river tortoise of four cubits, and a partridge somewhat larger than a vulture. With the ambassadors was that Indian, who burned himself at Athens, not to escape from present ills, but because hitherto successful in every thing he had undertaken; he now feared, lest any longer life should bring him misery and disappointment, and so

¹ Geograph. India. l. xv. c. 73, also Damasceni, Frag. 91; Frag. Hist. Græc. iii. v. 419. p. Didot.

² ‘Ὅς ἐκ μὲν τῆς ἐπιστολῆς κλειυὺς δηλοῦσθαι, οὓς ἰδεῖν φησι, τοὺς δ’ ἄλλους ὅπο μῆκους τῶν ὁδῶν διαφθαρῆναι το πλεον. Ut supra.

³ Was parchment or some prepared skin used for writing on by the ancient Hindus? All the MS. I have seen (from Birmah) were on palm leaves. And there is a passage in Hiouen Tsaang which would indicate that the leaf of the Tāla was used in his time for that purpose. “Les feuilles des Tāla (*Borassus flabelliformis*) sont longues, larges, et d’une couleur luisante. Dans tous les Royaumes de l’Inde il n’y a personne qui n’en recueille pour écrire, iii. v., 148 p.

² Καὶ ἐγώ μοις ἐν διόδῳ τε παρῆχιν, ὅπῃ βουλεῖται, καὶ συμπραττεῖν ὅσα καλῶς ἐχῃ. Ut supra.

smiling, naked and perfumed, he leaped into the burning pile. On his tomb was placed this inscription :—

"Here lies Zarmanochegas, of Bargosa, who according to the ancestral custom of the Hindus gave himself immortality."⁴

In this narrative, the king of kings, Porus, the Greek letter, the beggarly presents better suited to a juggler's booth than to the court of a great sovereign, strike us with surprise ; and we ask whether an Indian, or what purported to be an Indian Embassy, and such an embassy as described by Damascenus, ever presented itself to Augustus, and by whom, and from what part of India it could have been sent ?

To this Indian Embassy, Horace,⁵ a cotemporary, in more than one ode, exultingly and with some little exaggeration alludes ; and to it Strabo, almost a cotemporary, again refers ;⁶ where in opening his account of India, he laments the scantiness of his materials, that so few Greeks, and those but ignorant traders, and incapable of any just observation, had reached the Ganges, and that from India but one embassy to Augustus from one place and from one king Pandion or Porus had visited Europe. Of later writers who mention it, Florus (A.D. 110, 17) states "that the ambassadors were four years on the road, and that their presents were of elephants, pearls, and precious stones." Suetonius (A.D. 120, 30) attributes it to the fame of Augustus' moderation and virtues, which allured Indians and Scythians to seek his alliance and that of the Roman People.⁷ Dio

⁴ Ζαρμανοχηγας Ινδος απο Βαργοσης κατα τα πατρια Ινδων εθη ιαντον απθανατισας κειται.

⁵ Carmen Seculare 55, 6 (written about 17 B.C.) ; Ode 14, L. iv. (13 B.C.), and Ode 12, L. i. (22 B.C. according to Bentley, 19 B.C. according to Donatus); here he speaks of "Subjectos . . . Seres et Indos."

⁶ Ut supra 4, c. Και οι νυν δε εξ Αιγυπτιου πλειοντες εμπορικοι τη Νειλω και τη Αραβιω κολπω μεχρι της Ινδικης σπανιοι μεν και περιπλευκασι μεχρι του Γαγγον, και δυτοι δ' ιδιωται και ουδεν προς ιστοριαν των τοπων χρησιμοι, κακιωθεν δ' αφ' ενός τοπου και παρ' ενός βασιλειως Πανδιονος και αλλου (κατ' αλλους, Grosekurd) Πωρον, ηκεν ως Καισαρα τον Σεβαστον δωρα και πρεσβεια και ο κατακαυσας αυτον Αθηνησι σοφιστης Ινδος, καθαπερ ο Καλανος Αλεξανδρω την τοιαυτην θεαν επιδειξμενος. I have taken πρεσβεια as πρεσβεια, and I think the sense requires it. The other two editions I have consulted give πρεσβεια, which their Latin versions render "legatio."

⁷ Hist. Rom. iv. c. 12, ad calcem "Indi cum gemmis et margaritis elephantes quoque inter munerum trahentes nihil magis quam longinquitatem viae imputabant quam quadriennio impleverant."

⁸ Augustus 21 c. "Qua virtutis moderationisque fama, Indos etiam ac Scythas auditu modo cognitos pellexit ad amicitiam suam populique Romani ultro per legatos petendam,"

Cassius (A.D. 194) speaks of it at length; he tells, "that at Samos (B.C. 20) many embassies came to Augustus, and that the Indians, having before proclaimed, then and there concluded a treaty of alliance with him; that among their gifts were tigers, now seen for the first time by Romans and even Greeks, and a youth without arms, like a statue of Hermes, but as expert with his feet as other people with their hands, for with them he could bend a bow, throw a javelin, and play the trumpet." Dio then goes on to say "that one of the Indians, Zarmanos, whether because he was of the Sophists and therefore out of emulation, or whether because he was old and it was the custom of his country, or whether as a show for Augustus and the Athenians, for he had gone to Athens, expressed his resolution of putting an end to his existence. And having been first initiated in the mysteries of the two Gods⁹ held out of their due course for the initiation of Augustus, he afterwards threw himself into the burning pile." Hieronymus (A.D. 380) in his translation of the Canon Chronicon of Eusebius¹¹

⁹ Hist. Rom. L. 9, 58 p. ii., Bekker A. V. 734, B. C. 18. Augustus being then in Samos Πάμπολλαι δὴ πρὸς αὐτὸν ἀφικόντο, καὶ οἱ Ἰνδοὶ προκηρυκισαμένοι πρότερον φίλιαν τοῦτο ἐσπείσαντο, δῶρα πέμψαντες ἀλλὰ τε καὶ Τίγρεις, πρῶτον τότε τοῖς Ῥωμαίοις, νομίζω ὅτι καὶ τοῖς Ἑλλήσιν, ὀφθείσας, καὶ τι καὶ μαιρακίον οἱ ἀνευ ὤμων, δίδους τοὺς Ἑρμας ὀρωμεν, ἔδωκαν· καὶ μέντοι τοσούτων οὐκ ἐκείνῳ ἐς πάντα τοῖς ποσὶν αὐτὸ καὶ χερσὶν ἐχρητο, τόξον τε αὐτοῖς ἐνετείνα καὶ βέλη ἤφει καὶ ἰσαλπιζεν. . . . εἰς δ' οὖν τῶν Ἰνδῶν Ζαρμανός. . . . οὗτε καὶ ἐς ἐπιδείξιν τοῦ δε Ἀυγούστου καὶ τῶν Ἀθηναίων (καὶ γὰρ ἐκίσει ἡλθὲν) ἀποθανεῖν ἐθέλησας ἐμνηθῆ τε τὰ τοῖν θεοῖν, τῶν μυστηρίων καίπερ οὐκ ἐν τῷ καθήκοντι καίρῳ, ὥς φασί, διὰ τὸν Ἀυγούστου καὶ αὐτὸν μεμνημένον γενομένου, καὶ πυρὶ ἑαυτὸν ζῶντα ἐξίδωκεν.

¹⁰ Suetonius, without going into detail, casually confirms this initiation of Augustus at Athens "Namque Athenis initiatus, &c.," Aug. c. 93. But allowing that Augustus was initiated at Athens at this time, it does not follow that this Hindu was initiated with him, though such an initiation would be no impossible proceeding in a Buddhist priest.

¹¹ I have not cited Eusebius, because in Maius' and Zohrab's edition of his Canon Chronicon, founded on an old Armenian version, there is no allusion whatever to our embassy. I observe also that Scaliger's edition makes the same double and confused mention of it, and in the very same words that does George the Syncell's Chronographia, from which Scaliger large'y borrowed. Knowing then how Scaliger made up his edition of the Canon Chron. I suspect that even supposing a notice of our embassy in the original work, and this is doubtful (Maius' Pref. xviii), such a notice could not well have existed in the shape in which it now appears. Georgiu then, and Scaliger's Canon Chronicon under the 188th Olymp. state, τότε καὶ πάντων ὁ τῶν Ἰνδῶν βασιλεὺς ἐπεκηρυκίσσατο φίλος Ἀυγούστου γενέσθαι (καὶ συμμαχος) then going back to the 185th Ol. they tell of the death of Anthony and the capture of Lepidus, and how Augustus then became sole emperor, and how the Alexandrians compute the years of Augustus, and then add Πανδίων ὁ τῶν

just notices an Indian Embassy to Augustus,¹² but places it in the third year of the 188th Olympiad, or B.C. 26. And Orosius, a native of Tarragona (early part of the 5th century) relates,¹³ "that an Indian and a Scythian Embassy traversed the whole world, and found Cæsar at Tarragona, in Spain;" and with some rhetorical flourish, he then goes on to observe, "that just as in Babylon Alexander received deputations from Spain and the Gauls, so now Augustus in the furthest west was approached with gifts by suppliant Indian and Scythian Ambassadors." From these authorities, I think we may safely conclude, that an Indian Embassy, or what purported to be an Indian Embassy, was received by Augustus.

But in re-examining our authorities, we cannot but observe that:—while the majority of them are applicable to, or certainly not irreconcilable with, the embassy of Damascenus which reached Augustus at Samos, 20 B.C.; St. Jerome alludes to an embassy which he refers to the year 26 B.C., and which Orosius brings to Tarragona, whither Augustus had gone 27 B.C., and where he was detained till 24 B.C. by the Cantabrian war. Hence a difficulty, which Casaubon and others have endeavoured to remove by assuming two Indian Embassies; the one at Tarragona to treat of peace, the other at Samos to ratify the peace agreed upon. But not to mention that this preliminary embassy is unknown to the earlier writers,¹⁴ who all so exult in the so-called second embassy that they scarcely would have failed to notice the first; I would observe, First, that no author whatever speaks of two Indian Embassies. And, secondly, I would refer to the ambassadorial letter of which Damascenus has preserved the contents; for there we find no mention of a previous contract or agreement between the two sovereigns, but simply an offer on the part of the Hindu prince to

Ἰνδῶν βασιλεὺς φίλος Αὐγούστου καὶ συμμαχος πρεσβεύεται. Georg. Syncellus Byzant. Hist. Niebuhr. 588, 9, ib.

¹² Indi ab Augusto amicitiam postularunt, 188th Olym. Migne ed.

¹³ Interea Cæsarem apud Tarraconem citerioris Hispaniæ urbem legati Indorum et Scytharum toto orbe transmissis tandem ibi invenerunt, ultra quod quærere non possent, refuderuntque in Cæsarem Alexandri Magni gloriam; quem sicut Hispanorum Gallorumque legatio in medio Oriente apud Babylonem contemplatione pacis adiit, ita hunc apud Hispaniam in Occidentis ultimo complex cum gentilitio munere eous Indus et Scythæ boreus oravit. Orosius. Hist. vi. c. xii.

¹⁴ I don't overlook the προκηρυκεσάμενοι προτερον φίλιαν τότε ἐπεπισαντο of Dio Cassius, nor the ἐπεκηρυκεύσατο of Georgius. But with regard to the first, is it, looking at the context, possible to conceive that those προκηρυκεσάμενοι were other than those who τότε ἐπεπισαντο, and who were at Antioch 22 A.C. and who then probably gave notice of their mission by herald? With regard to the second, I have but to observe that the ἐπεκηρυκεύσατο belongs to the 188th Olymp. or 26 A.C., and cannot consequently refer to a previous embassy.

open his country to the subjects and citizens of Rome in the person of Cæsar. Surely, then, than this embroglio of embassies which come to sue for peace where war was impossible, it is more natural to suppose that Jerome, a careless writer,¹⁵ misdated his embassy; and that Orosius, a friend and pupil of Jerome,¹⁶ finding that the date in Jerome tallied with Cæsar's expedition to Spain, seized the opportunity both of illustrating his native town and instituting a comparison between Augustus and Alexander the Great. I think we may rest content with one embassy.

But is Damascenus' account of this embassy a trustworthy, and faithful account? In transcribing, Strabo to some extent confirms it by stating that the Hermes he himself had seen (*ὃν καὶ ἡμεῖς εἶδομεν*); and in another place, while he rather attributes our embassy to a Pandion than a Porus, he connects it with the Indian who burned himself at Athens.¹⁷ Plutarch (A.D. 100, 10) in noticing the self-cremation of Calanus, Alexander's Gymnosophist, adds that many years afterwards at Athens, another Indian in the suite of Augustus similarly put an end to his life, and that his monument is still known as the Indian's tomb.¹⁸ Horace, Florus, and Suetonius, give indeed another character and other objects to the embassy, but write too loosely to be authorities for any fact not reconcileable with the narrative of Damascenus. With that narrative Dio Cassius, too, in the main agrees; but as he specifies tigers, a truly royal gift, and unknown to Damascenus, as among the Indian presents, he gives us an opportunity of testing his and Damascenus' accuracy. For he affirms that the tigers of the embassy were the first ever seen by Romans. Now Suetonius mentions it as a trait of Augustus, that he was ever so ready to gratify the people with the sight of rare or otherwise remarkable animals, that he would exhibit them, "*extra ordinem*," out of due course and on ordinary days, and that in this way he exhibited a tiger on the stage.¹⁹ And Pliny states that "a tame tiger" (and

¹⁵ "Propter festinationem quam ipse in Chronici præfatione fatetur." Maius, *Can. Chron. Præf.* xix.

¹⁶ Smith's *Dict. of Greek and Rom. Biog. Art.* Orosius.

¹⁷ Vid. *supra*, note 3.

¹⁸ Τούτο πολλοῖς εἴσιν ὑστερον ἄλλος Ἰνδὸς ἐν Ἀθηναῖς Καίσαρι συνῶν ἐποίησεν καὶ δεικνύται μέχρι νῦν τὸ μνημεῖον Ἰνδοῦ καλουμένον. *Alexandri vita, vitæ* iii. 1290 p.

¹⁹ Solebat etiam citra spectaclorum dies, si quando quid novitatum dignumque cognitu advectum esset, id extra ordinem quolibet loco publicare: ut rhinocerotem apud septa, tigrim in scenâ, anguem quinquaginta eubitorum pro Comitio." *Augustus* 43 c.

other than tame tigers our ambassadors would scarcely carry about with them) "was shown in Rome for the first time at the consecration of the Theatre of Marcellus (the in scenâ of Suetonius) in the Nones of May and during the consulships of Q. Tuberus and Fabius Maximus,"²⁰ or in the year 11 B.C. i.e. nine years after the date of our embassy, hardly, therefore, a tiger presented by it. The evidence of Dio Cassius on this point is then, to say the least of it, unsupported, and we see no reason to believe that tigers were among the Indian gifts. We thus find the account of Damascenus confirmed in several particulars, and in none satisfactorily impugned. We accept the Indian Sophist, we accept the Hermes, we accept the beggarly presents, and because we accept so much we accept also the Greek letter, and the Pandyan or Puru, king of kings; for we believe, as Strabo also evidently believed, that what Damascenus wrote, he wrote from his own knowledge. But how then explain what is so at variance with our established notions?

Lassen²¹ in that great Encyclopædia of Hindu literature, the "Indische Alterthumskunde," evidently struck by the good faith of Damascenus' narrative, has endeavoured to smooth down the difficulties attached to it. The 600 subject kings he sets down to evident exaggeration, but he thinks that the Porus of the embassy was the Paurava Prince, who at the beginning of our æra, on the death of Kadphises II, founded an independent kingdom in the Western Punjab, and who as a serpent-worshipper would look upon the sacred reptile as a fit offering to a brother sovereign. He accounts: for the presents by suggesting, that the more valuable of them the ambassadors had sold on the road: and for the Greek letter, by supposing that it was obtained from some Greek scribe, and substituted for the royal credentials.²²

This explanation, however ingenious, is scarcely satisfactory. For,

1st. If our ambassadors procured a Greek version of the royal letter, then, as Damascenus expressly states that their letter was in

²⁰ Augustus Q. Tuberone, Paulo Maximo coes. iv. Nones Maias Theatro Marcelli dedicatione tigrim primus omnium Romæ ostendit in cavâ mansuetum: Divus vero Claudius simul quatuor. Plin. Hist. Nat. viii. 25.

²¹ Indische Alterthumskunde 59, 60 p. iii.

²² Surely the Greek legends on Indian coins, where the sovereign's name, which could not have been copied from any existing die, is found with its proper inflexions, as e. g. on the coins of Azes 50 A.C. ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΜΕΓΑΛΟΥ ΑΖΟΥ (Wilson's *Ariana Antiqua* 325), would indicate that in the N.W. provinces of India the Greek language was not utterly forgotten: and if we could believe that our embassy came from the Punjab, we would take it for granted that its Greek letter was composed there.

Greek, it follows that they must have suppressed the original letter and substituted for it what may or may not have been a translation, i.e., we must suppose them guilty of the gravest crime which can be laid to the charge of ambassadors, the falsification of their credentials.

2dly. Allowing our Porus to have been a serpent-worshipper, was he therefore likely to approach an unknown ally with one of his pet gods, and such a god! as an offering? I have never heard that the old Egyptian Pharaohs, in reciprocating civilities with any neighbouring king, ever presented him with some well-grown crocodile, or a case of beetles with their appropriate garniture. But let the serpent pass. You have still to account for the vipers and the tortoise. And if you allege in apology that these were but the dregs and refuse of a once richly freighted embassy, and that all that was of value, the pearls and spices, had been sold: then as it could only have been sold under the pressure of want, you have to show that under the circumstances the pressure of want was probable. Now, though the journey before our ambassadors was long and perhaps dangerous, it was over no strange and untrodden country, but along the most ancient route in the world,²³ frequented by caravans, with many stopping places well known and at ascertained distances;²⁴ it is scarcely credible, then, that they should set out otherwise than provided against all contingencies, as well provided at least as the merchants whom they probably accompanied, and scarcely credible that they should have actually suffered from want. But may not the troubles which then harassed the Parthian Empire have delayed their progress, lengthened their journey, and increased its expenses? Yes, but as those troubles were now of long standing, they appear, surely, rather as a reason against the setting out of the embassy than as one for its miserable plight on arrival.

3dly. The Paurava Prince to whom Lassen would ascribe this embassy, obtained his throne only after the death of Kadphises II, and in the beginning of our æra. And as Kadphises conquered India, more properly, the Punjab and Kabulistan, according to Lassen himself about 24 B.C. and died about 10 B.C.,²⁵ and as our embassy met Angus-

²³ Arrian speaks of a *λεωφόρος ὁδός*, extending, evidently from the context, in the direction of India through Bactria. Exp. Alexand. iii. L. 21 c.

²⁴ v. *Mansiones Parthicæ* Isidori Characeni. Geograph. Minor⁴ iv. Didot ed., and a short account of another route for goods in Pliny, Hist. Nat. vi., xix.

²⁵ Lassen ut supra ii. 411 p. corrected by note 8, p. 813. Kadphises wahrscheinlich Indien 24 v. Christi G. eroberte und etwa 14 Jahren nachher starb. Wilson, *Ariana Antiqua* places him, however, "not earlier than the commencement of the Christian æra," and seems to have misunderstood Lassen when he adds that "Lassen proposes the end of the 1st century as the term of the king-

tus at Samos 20 B.C., it very evidently could not be the embassy of the Paurava Prince. And it could hardly have represented either Kadphises, or the King whom Kadphises dethroned; because it is improbable that Kadphises, in any transaction with a foreign sovereign would appear disguised under a Hindu name; and very improbable that either the king who had just conquered a kingdom, or the king who was on the point of losing one, should occupy himself with embassies not of a political, but of a purely commercial character, and for an object, which the very countries that separated him from Rome rendered impossible.

But how then account for all that surprises us in this embassy?

What do we gather from Damascenus' narrative?

I. He met our ambassadors at Antioch Epidaphne. Now Antioch Epidaphne is so situated that it is just as probable they arrived there on the road to Greece from the western coast of the Indian Peninsula either by way of the Red Sea and Alexandria or the Persian Gulf and the Euphrates, as by the mid-Asiatic route and from the Punjab.

II. Damascenus mentions as accompanying or attached to the embassy, a native of Barygasa, and though he states that the ambassadorial letter was written in the name of Porus, yet Strabo rather ascribes it to a Pandion; and as Barygasa is a trading town at the mouth of the Nerbudda on the Indian coast, and Pandya a kingdom extending along the Western shores of the Indian Peninsula, to the Western coast of India, I conclude with Strabo, that the embassy probably belongs.

III. This native of Barygasa, or Barygaza, Sanscrit, Varikatcha (Julien), is described as a Hindu, and bears a name Zarmanos Chagan, Sanscrit *cramanakarjā*,²⁶ Father of the Shamans, which points him out of the Buddhist faith, and a priest and as his death proves a priest earnest in his faith. His companions then were probably Hindus also, and perhaps Buddhists, and the representatives of a Hindu, and possibly a Buddhist prince.

IV. The wretched presents—the Greek letter—the sort of doubt which hangs over the name and country of the prince, are all indicative, not of the sovereign of a great kingdom, but of the petty raja of some commercial town or insignificant district.

V. The presents not unsuited to the tastes of Augustus, and the

dom of Kadphises, 353 p. As to the extent of his dominions, Lassen ib. 818 p. observes "Seine Beinahme, Beherrscher der Erde, macht Ansprüche auf ein ausgedehntes Reich. Diese Ansprüche müssen auf Kabulistan und das Punjab beschränkt werden."

²⁶ Lassen ut supra iii. 60 p.

Greek letter, and its purely commercial tone, indicate that our embassy was planned and organized by Greek traders, and more for Greek than Hindu interests.

VI. This embassy is conceivable only under the supposition that if it forwarded the interests of the Greeks who planned it, it also benefited the Hindu prince, who was induced to lend it his name.

But who was this Prince? who these Greeks? and what their common interests? The prince and his residence we are unable to identify. There is nothing in the reptiles of the presents, larger indeed in Guzerat,²⁷ but common to the whole western coast of India, which can enable us to fix on the locale of the embassy. If we turn to the name of the prince, we find that he is a Porus in the ambassadorial letter, but had become Pandion when Strabo wrote²⁸ and the Peninsula was better known. A Puru of the Punjab we have seen that in all probability he was not; and I do not understand how he could well have been a Pandyan; because Pandyan was a great and powerful sovereign, and of the Saiva faith,²⁹ the most bigotted of the Hindu forms of religion, and was not likely therefore either to have initiated a commercial alliance with a foreign state, or to have initiated it by such an embassy as ours. D'Anville suggests that he was a Rana of Ougein, who claimed a descent from Porus.³⁰ But surely a descent from Porus, real or pretended, is not in itself sufficient to identify our prince, unless it can be shown that like the Pandynes and the Guptas, he attached to his own name that of his ancestors, used it as a family name, or in all public documents styled himself son of Puru. Besides, it seems to me that Ougein is too far inland to have

²⁷ For the serpents of Guzerat see Forbes Oriental Memoirs i. 480: for the partridges of the Nerbudda, the black kind are striking from their beauty, none remarkable for their size, id. 501. Might the partridge of the embassy, large as a hawk, have been the jungle fowl which Forbes describes as having something of the plumage of the partridge.

²⁸ As the kingdom of Pandya according to the Periplus Eryth. Anony. is the S. Deccan and extends from Nelkunda, Nelisram, to Komar, Cape Comorin (54, 53 § Didot ed.) we see how with the increase in the direct trade the name Pandion should become better known at Alexandria than that of Porus, and at length take its place.

²⁹ The prevailing form of the Hindu religion in the south of the Peninsula was at the commencement of the Christian æra and some time before it, most probably that of Siva. Hist. Sketch of Pandya. Wilson Journal Roy. As. Soc. iii. 204 p.

³⁰ Vincent's Commerce of the Antients, ii. 407. It is perhaps as well to state, that from a note of Wilson's in his sketch of Pandya, it seems that the Harivansa and Agni Purana make Pandya of the line of Puru; but that as he is not so specified in the Vishnu Purana, Wilson is of opinion that "his insertion is the work of more recent authorities." Journal, Roy. As. Soc. iii. No. 1 note.

come into direct contact with Greek traders, and to have known anything of Augustus and the Roman Empire. To recur then to our narrative, it records the name of one Indian town, Bargaosa, or Barygaza.²¹ And in the neighbourhood of Barygaza, and indeed throughout the Northern part of the Peninsula, statues and temples of Buddha are still seen, which indicate that there formerly Buddhism was certainly recognised, perhaps flourished, and was on the ascendant.²² Barygaza besides, situated at the mouth of a great river, was when the Periplus was written a place of considerable trade, the great and legal mart²³ of commerce with the West, a city therefore which would probably avail itself with eagerness of any opportunity for assuring its friendly relations with its great customer, Rome; and to it I should be inclined to refer our embassy. But when we remember that Damascenus miscalls it, and that Strabo copies and does not correct him, and never himself notices the place, we may well doubt whether in the times we are speaking of, it was frequented by Greeks, or better known to them than the other commercial ports on the same part of the coast.²⁴ And except that one of its citizens was in the ambassadorial suite, I do not think it can show any special claim to our embassy.

Who our Greeks were we may more accurately determine. After the destruction of the Persian Empire, the two great Western marts for the produce of India were Palmyra and Alexandria. But with regard to Palmyra—

I. Its distance from the Peninsula of India was too short, and the route through the Persian Gulf and up the Euphrates too direct to admit of a journey so long, that from the mere time it occupied, as hinted by Damascenus, several of the ambassadors should have died on the road.

²¹ Barygaza was the port of Ougein and may have belonged to it, *Ἐνὶ δὲ αὐτῇ (Inest huic regioni) καὶ ἐξ ανατολῆς πόλις λεγομένη Οὐγὴν ἐν ἣ καὶ τὰ βασιλεία πρῶτερον ἦν, ἀφ' ἧς πάντα ————— εἰς Βαρύγαζα καταφέρονται.* 48 §.

²² Forbes in the plates to his *Oriental Memoirs*, gives a statue of Buddha (he calls it of Paravant) which he saw at Cambay, and of Buddhist figures on columns at Salsette. Hiouen Tsang, in noticing the state of Buddhism in Barygaza and Ougein, speaks of it as on the decline, iii. 164, as flourishing in Guzerat, ib. 166, and in the Konkan, ib. 147.

²³ Not always so. The Periplus tells us that *Καλλιένα* (hodie Calliani non longe a Bombay distans) *ἐπὶ τῶν Σαραγάνου τοῦ πρῆσβυτερου χρόνων ἐμπορίον γίνομαι ον. μετὰ γὰρ τὸ κατασχεῖν αὐτὴν Σανδάνη ἐκωλύθη ἐστὶ πολὺ, καὶ γὰρ τὰ ἐκ τύχης εἰς τοὺς τοὺς τοποὺς εἰσβ' ἄλλοντα πλοῖα Ἑλληνικά μετὰ φύλακῆς εἰς Βαρύγαζα εἰσάγεται.* 52 § with the note.

²⁴ See preceding note.

II. Palmyra at this period still retained its national character and civilization, and was essentially a Syrian republic. It had not yet merged into that Græco-Roman city which it became, after the time of Trajan, and which its ruins and the legends on its coins and the names of some of its citizens illustrate.³⁵ Greek and Roman residents it no doubt admitted, but they could have been neither numerous enough, nor powerful enough to have organised and forwarded our embassy.

III. Palmyra, situated in the desert some eighty miles from the Euphrates, was pre-eminently an inland town. Its citizens and resident strangers were merchants, warehousemen, carriers, agents, but they assuredly were not seafaring men; they possessed no ships, but received the produce of India through the Arabs, whose vessels delivered it at Sura or Thapsacus on the Euphrates, whence it was brought on camels to Palmyra. They neither had nor could have any direct intercourse with India, and without such an intercourse our embassy is not conceivable.

IV. Palmyra is not likely to have encouraged any Indian embassy to the Roman Emperor. It was a free city.³⁶ Its inhabitants had not forgotten the designs of Anthony and the dangers they had but lately escaped,³⁷ and it was not probable that they would now, of their own free will, call Roman attention to their wealth, and place the Indians, from whom they derived it, in direct communication with their own best customers. Through Palmyra this embassy could not have made its way to Augustus.

We turn now to the Greeks of Alexandria. Alexandria, with a population made up of about every nation under the sun was essentially a Greek city. It carried on a large, profitable, and increasing trade with the East.³⁸ And though at the period of our embassy, its

³⁵ For this account of Palmyra I have consulted Pliny, Hist. Nat. v. 21; Gibbon's Roman Emperors, c. xi. vol. i.; Heeren's Manual of Ant. Hist. 348, 57 pp.; the Art. Zenobia Smith's Gk. and Rom. Biog. Diet., and the Art. Palmyra by Flügel, and Pellographie iv. 2, by Gesenius, Erach. Gruber's Encyclopedie.

³⁶ Palmyra—velut terris exempta a rerum naturâ *privatâ sorte*, inter duo imperia summa, Romanorum Parthorumque, et prima in discordia semper utrumque cura. Plin. ut supra—*privatâ sorte*, sui juris.

³⁷ Anthony sent out a body of cavalry to surprize and plunder Palmyra, *μικρα μὲν επικαλὼν αὐτοῖς, ὅτι Ῥωμαίων καὶ Παρθυαίων ὄντες ἐφορτοί, ἐς ἑκατέρους ἐπιδέξιως εἶχον, ἐμποροὶ γὰρ ὄντες κυμίζουσι μὲν ἐκ Περσῶν τὰ Ἰνδικὰ τῇ Ἀραβίᾳ διατρίβοντα ὅτι τῇ Ῥωμαίων.* Appian de Bell. Civ. v. ix. Appian attributes this expedition to a desire for plunder only. I suspect it was rather undertaken in the interests of Alexandria.

³⁸ Strabo states that in the time of the Ptolemies some 20 ships only (xvii. L. i. c.

merchants seldom ventured beyond the Arab Ports of Cane and Aden,³⁰ where they traded for the products and manufactures of India ; they nevertheless occasionally sailed for the Indian Seas, and made their way even to the Ganges. And as they then interfered with the Arab monopoly, they saw themselves every where jealously watched and opposed by the Arabs, every where treated as interlopers, and had every where to encounter the persecutions of an excited populace. Only in some of the smaller and therefore neglected ports, could they find opportunity and permission to trade. And then how eagerly would they lay before the authorities the advantages of a direct trade ! They would show them the prices asked and obtained by the Arabs for Hindu and Greek commodities, and point out how of the profits the Arabs carried away the lion's share. And if they fell in with some Raja of the Buddhist faith, a faith without the prejudices of race, proselytising, catholic, and not averse to travel, they surely would easily persuade him, as in after times the Rajah of Ceylon was persuaded, to further and attempt to assure the direct trade by an embassy, the details of which a small Prince would willingly leave to them.

But besides this commercial interest common to both peoples, the Greeks of Alexandria had an interest of their own in getting up this embassy. In the great civil war, not long concluded, they had been partisans of Anthony, they had fought in his ranks, and were the last to yield after his defeat. They had to conciliate the favour of the conqueror. But they were no vulgar flatterers, theirs was not that adulation which repeats ever the same cuckoo note of praise. They studied their man, and to his temper and character adapted their tone. To the literary Claudius they devoted a new room in their Museum,⁴⁰ and placed his works among their class-books. The theatre-circus-loving Nero they wheedled by hired bands of artistic *claqueurs*.⁴¹ And the usurpation of the plebeian Vespasian they sanctioned by endowing him with miraculous powers.⁴² How now would such a people seek to

130) ventured to cross the Indian seas, but that the trade had so greatly increased that he himself saw at Myos Hormus 120 ships destined for India, L. ii. v. c. 12 §.

³⁰ Vincent's Commerce of the Antients ii. 53, and Periplus 27 c.

⁴⁰ Denique et Græcas scripsit historias——Quarum causâ veteri Alexandriæ Museo alterum additum ex ipsius nomine ; institutumque ut quotannis in altero *Τυπηνικῶν* libri, altero *Καρχηδονιακῶν*, diebus statutis, velut in auditorio recitarentur. Suetonius Claud. 42 c.

⁴¹ "Captus autem modulatis Alexandrianorum laudationibus, qui de novo comenatu Neapolim confluxerunt, plures Alexandriâ evocavit" Nero 20 c.

⁴² Auctoritas et quasi majestas quædam, ut scilicet inopinato et adhuc novo Principi deerat : hæc quoque accessit. E plebe quidam luminibus orbatu, item

win over the politic Augustus? They bring to his feet these Indian ambassadors, and thus raise him to a rivalry with Alexander. That he was too wise and far-seeing to be himself deceived, is probable enough, but is no valid objection. What cared he that the crown was of copper-gilt, and the robes of tinsel, provided that the plaudits were real? The object of the Alexandrians was not to impose on him, but to gain his favour by enabling him to impose on the Roman people; and that they fully succeeded, Roman history sufficiently testifies.

In conclusion, I thus explain and account for our embassy. In the Northern half of the Indian Peninsula, a Hindu Raja in his intercourse with Greek merchants, often hears from them of the greatness and wealth of their metropolis, and of the advantages which he and his country would derive from more intimate commercial relations with it; and they advise an embassy, and offer a passage in their ship for the ambassadors and for such presents as they can conveniently carry, and he conveniently send. The raja is persuaded. In due course the embassy arrives at Alexandria, and for Alexandria only it may have been originally intended. But the Alexandrians, alive to their own interests, quickly forward it on to Augustus, and give it weight and dignity by affixing to the Greek letter with which they provide it, a well-known and time-honoured name. The presents they leave unchanged, aware that the travel-worn ambassadors, whose home is so distant that some of them have died on their way to Cæsar, will impress the imagination more strongly than heaps of barbaric pearl and gold.

While I offer this explanation, I do not pretend that it is entirely satisfactory, "refutation-tight;" enough if it seem to others as to me, less improbable, less open to objection, more simple, and more in accordance with the facts given than others.

aliis debili crure, sedentem—adierunt, orantes opem valetudinis, demonstratam a Serapide per quietem.—Cum vix fides esset—ideoque ne experiri quidem audiret, hortantibus amicis palam pro concione utrumq; tentavit, nec eventus defuit. Vespasianus, id. 7 c. The same miracles are related by Tacitus; but in Tacitus, Vespasian is only mystified. Hist. iv. 81.

ART. XV.—*Description of an Arabic Quadrant.* By WILLIAM H. MORLEY, Esq., *Librarian, Royal Asiatic Society.*

[*Read 4th February, 1859.*]

CONSIDERABLE attention has been attracted of late years to the astronomical instruments of the people of Asia. Many of these instruments, though far from modern, are remarkable for accuracy and beauty of workmanship, and not a few present admirable specimens of delicate engraving, inlaying, and ornament. The Sédillots, father and son, and others, have done much to elucidate the subject; but it is still far from exhausted, and every addition to our present materials for its illustration cannot fail to be of interest.

The quadrant which I have undertaken to describe was purchased for me at Damascus a few years since, by my friend Dr. Sprenger. It offers some peculiarities not hitherto noticed, so far as I know, by other writers: it is a good example of workmanship, and is of respectable antiquity, having been constructed in A.H. 735 (A.D. 1334). The fac-similes of the inscriptions on the quadrant which I have added, have been printed in lithographic ink from the instrument itself, and transferred to the stone by double transfer, so that they present an exact reproduction of the original. I have annexed to the fac-similes, diagrams explanatory of each.

The instrument is made of brass, inlaid with gold, silver, and copper, and is in perfect preservation. The suspensory apparatus, which is like that of an Astrolabe,¹ is complete: *A* (diagram, fig. 1) is the 'Ilákah عِلَاقَة "cord," from which the quadrant hangs when in use; *B* is the Halkah حَلَقَة "ring," to which the 'Ilákah is attached; *C* the 'Urwah عُرْوَة "handle," sometimes called the

¹ See Description of a Planispheric Astrolabe, constructed for Sháh Husain Safawí, King of Persia, and now preserved in the British Museum; comprising an Account of the Astrolabe generally, with Notes illustrative and explanatory: to which are added, Concise Notices of Twelve other Astrolabes, Eastern and European, hitherto undescribed. By William H. Morley. Grand-eagle folio, with 21 Plates. London, 1886. As my work on the Astrolabe is somewhat costly, and a very limited number of copies were printed, I shall transfer into the present paper such portions of it as are necessary for the description of my quadrant, without giving further references to the original work.

Habs حبس "prison," receives the Halkah, and its flattened extremities are fastened by means of a rivet to the quadrant itself, securing to the latter the utmost freedom of motion, but without shake, between the extremities of the 'Urwah. I shall now proceed to describe the inscriptions on the two faces of the instrument.

Those on the first face (fig. 1) differ from any that I have seen in other quadrants, and are nearly identical, though only partially traced, with those usually found upon the face of astrolabes that are constructed to be used at one place or station only, and in which the Umm أم "mother," and the Hajrah جرة "side," are in one plane. *D d*, *E e*, are portions of the Hajrah, sometimes called the Kiffah كفة "rim," or the Tauk طوق "ring," "collar;" the Hajrah is the limb of the astrolabe, and is divided into 360 degrees. The arc *D H* is the Kaus al-Irtifā' قوس الارتفاع "arc of altitude:" it is a quadrant of the Hajrah, and is divided into 90 degrees, arranged and numbered both ways, five and five; each degree is divided into two portions, each of course comprising 30 minutes. The continuation of the Hajrah, *H d*, is similarly divided and numbered by fives, both ways, from 0° to 25°, and from 65° to 90°. *E e*, the completion of the half of the Hajrah of an astrolabe, is placed against the Tropic of Cancer, and is numbered by fives, both ways, from 0° to 65°, and from 15° to 80°.¹

Next within the arc of altitude and its divisions, which form the first band, is the arc of the shadow, measured by fingers, forming, with its divisions, a band *F f*: it is divided into 90 degrees, arranged and numbered by threes up to 45°, then by fives to 70°, and finally by tens to 90°; at *F* are the words Zill Asābi' ظل أصابع "shadow of fingers."

Inside the arc of the shadow, there is a stereographic projection of the sphere partially traced. It is similar to that found on the Safā'ih صفائح "tablets:" the ordinary tablets of astrolabes. First are the two diameters. The line *D P e* is the Khatt' Wasat as-Samā

¹ It appears to me that these last-mentioned numbers are understated each time by ten; they should be from 25° to 90°.

² The word Khatt' خط "line," when used in describing the sphere, signifies the intersection of the plane of any great circle with that of the horizon, or any circle parallel therewith. For example: 'Abd al-'Alī Barjandī, in his Commentary on the Prolegomena to Ulugh Bég's Tables, defines the Khatt' Nisf an-Nahār, or meridian line, as the section common to the plane of the circle of the meridian and that of the horizon, either rational or sensible.

خط وسط السماء "line of the midst of heaven,"¹ also called the Khatt Nisf an-Nahár خط نصف النهار "line of midday:" this latter appellation is, however, more strictly employed to signify the portion of the line, Dh , above the horizon; the lower portion, he , being termed the Khatt Nisf al-Lail خط نصف الليل "line of midnight," or the Khatt Watad al-Arṣ خط وتد الأرض "line of the pivot of the earth," or the Khatt az-Zawāl خط الزوال "line of the going down (of the sun)." The line HG at right angles to DPe , is a portion of the horizontal diameter, called the Khatt al-Istiṡā خط الاستواء "straight," or "level line," or the Ufk al-Istiṡā افق الاستواء "right," or "straight horizon." This straight horizon is also named the Khatt al-I'tidāl خط الاعتدال "line of equality," i.e., "the line of the equinoxes," and very frequently the Khatt Wasat al-Mashrik wa al-Maghrib خط وسط المشرق والمغرب "line of the midst of the East and the West;" the line HG , if produced to P , would be termed the Khatt al-Mashrik خط المشرق "line of the East;" the remaining half, not shown on the quadrant, being the Khatt al-Maghrib خط المغرب "line of the West." Of these two diameters, the perpendicular represents the solstitial colure and the meridian; the horizontal, the colure of the equinoxes, and the line of

خط نصف النهار فصل مشتركست میان سطح دائرة نصف النهار
و سطح افق حقیقی و فصل مشترك را میان سطح نصف النهار و
سطح افق حسی نیز خط نصف النهار کویند

It must be understood, however, that the word Khatt does not mean the *line* of intersection *as such*, but that it is merely an accidental name of a circle of the projected sphere, where the *projection of such circle* happens to be *also* the intersection of its plane with the circle of projection. The European authors used the word *line* in the same sense.

¹ The circle of the midst of the apparent heaven is defined by 'Abd al-'Alī Barjandi as a great circle passing through the poles of the ecliptic and those of the horizon:

و دائرة عظیمه که بقطب افق و قطب منطقة البروج کدرد آنرا
دائرة اقلیم رویت و وسط سما رویت کویند بجهت آنکه منصف
نصفین منطقة البروج است

intersection of the planes of the equinoctial, and of the prime vertical with that of the horizon. The point P , where the line HG , if produced, and the line DPe would intersect, is the North Pole. We now come to the three circles, of two of which a quadrant only is traced, and of the third, a semicircle. IK , forming the inner portion of the arc of the shadow, is a fourth part of the Tropic of Capricorn, or the Madár rás al-Jadí مدار رأس الجدى "circle of the head of Capricorn," sometimes

called Al-Munkalab ash-Shatawī المنقلب الشتوى. $L G$ is a quadrant of the equinoctial, or the Madár Awwal al-Hamal wa-Awwal al-Mizán مدار أوّل الحمل وأوّل الميزان "circle of the beginning of Aries and the beginning of Libra," otherwise termed the Madár Rás al-Hamal مدار رأس الحمل "circle of the head of Aries," the Mu'addal al-Lail wa an-Nihár معدّل الليل والنهار "place of equalization of night and day," or simply the Mu'addal an-Nihár, and the Dáīrah al-I'tidál دائرة الاعتدال "circle of equality." The semicircle $M m$ is the half of the third circle, viz., the Tropic of Cancer, or the Madár Rás as-Saratán مدار رأس السرطان "circle of the head of Cancer," sometimes called Al-Munkalab as-Saifi المنقلب الصيفي

الصيفي "the summer place of turning." Next are the Mukantarát مقنطرات "bridges," $N n n n$, which are the almucantars, or circles parallel with the horizon. The first almucantar, $N h$, which passes through the points where the equinoctial cuts the straight horizon, is called the Ufk افق "horizon," or the Ufk al-Mashrik wa al-Maghrib افق المشرق والمغرب "horizon of the East and the West." The Ufk is the true or astronomical horizon, which separates the upper from the lower hemisphere, so that all that is above it is visible at the place for which the projection was constructed, and all below it hidden. The portion that is above it, both in reality and in the projection, is called Fawk al-Arz فوق الارض "above the earth;" that which is under is termed Taht al-Arz تحت الارض "below the earth." The arc $N G h$ is the portion of the Ufk called the Ufk al-Mashrik افق المشرق "horizon of the East;" the point G is termed the Nuktah al-Mashrik نقطة المشرق "East point;" the corresponding portion and point on the west side of the meridian line, not shown on this instrument, are called the West horizon and West point. The two points are sometimes called the Mashrik al-I'tidál مشرق الاعتدال "East of the equinoctial," and Maghrib al-I'tidál,

مغرب الاعتدال "West of the equinoctial," that is, the equinoctial points. The centre of the almucantars, Z , within the arc NGh , is the zenith, and is called the Samt ar-Rás سمت الرأس "direction of the head," or the Kutb al-Ufk كُتُب الافق "pole of the horizon." From the Ufk to the Samt ar-Rás the division is into 90 degrees. Astrolabes are classed by the number of almucantars which are traced: where there are ninety circles, comprising the Ufk, the instrument is called Támm تامم "perfect," "complete," or "solipartite;" where there are forty-five circles, it is termed Nisfi نصفى "bipartite;" the Thulthi ثلثى "tripartite," contains thirty circles; and so on until the decempartite. The almucantars on our quadrant, Nnn , are of the third description, or tripartite, there being a separate circle for every three degrees, numbered three and three from 3 to 36 within the Tropic of Capricorn, from N to I ; and then from 36 to 90 on the outside of the meridian line, from I to Z ; thence from Z to h they are numbered, still outside the meridian line, six and six, from 90 to 6. The almucantars nnn , within the Ufk, are termed the Mukantarát al-Irtifá' مقنطرات الارتفاع "almucantars of altitude," and these are the only ones usually found in astrolabes. But there are other almucantars occasionally but very rarely inscribed, which are placed below the horizon, and are called the Mukantarát al-Inhítát مقنطرات الانحطاط "almucantars of declination." These, $Oooo$, are traced in the present instrument, within the Tropic of Cancer, three and three, beginning from the Ufk, or true horizon; the numbering, outside the meridian line, is by sixes, from 6 to 30; the last number is 33, which brings the almucantars of declination almost to that which is equal to the latitude of the place for which the projection was constructed, which would be a straight line parallel with the straight horizon. Outside the Ufk, at its eastern extremity, between N and G , the latitude is written, viz., "For the latitude $33^{\circ} 27'$." This latitude is that of Damascus, for which place the instrument was constructed.¹ The Sumút سموت "ways," "directions," Ggg next claim our attention; they are the azimuths, or vertical circles, and are traced ten and ten, above the earth within the horizon, and below the earth as well, within the Tropic of Cancer. The arc GZ is called the Awwal as-Sumút أول السموت "first of the azimuths," or the Dáirah al-

¹ Eastern geographers vary very much in their statements of the latitude of Damascus, but the latitude as given on the quadrant is correct.

Mashrik wa al-Maghrib دائرة المشرق والمغرب "circle of the East and the West;" it is the prime vertical. The azimuths are not numbered. The arc $G I$ is the portion of the zodiac above the straight horizon, when the head of Capricorn is in apposition with the southern extremity of the meridian line; the arc $G M$ is the remainder of the zodiac when in a reversed position. In both these arcs each sign is divided into thirty degrees, marked by threes; the signs are not indicated by writing as is usual on the 'Ankabút or Rete of an astrolabe. The arc $Q q$, distinguished by being dotted, is the Khatt al-'Asr خط العصر "line of the afternoon," or time of afternoon prayer.

This completes the description of the lines and circles on this face of the instrument; but in addition to these there are set down various fixed stars, with their names and right ascensions, as follows:—

- I.* Rijl al-Jauzá رجل الجوزا for Rijl al-Jauzá al-Yusra رجل الجوزا اليسرى "the left foot of Jauzá," $160^{\circ} 38'$ (β Orionis; Rigel; Rigel Algenze). *II.* Jabhah al-'Akrab جبهة لعقرب "the forehead of the Scorpion," $321^{\circ} 47'$ (β and ω Scorpii). *III.* Matn متن for Matn al-Faras متن الفرس "the back of the horse," $67^{\circ} 47'$ (α Pegasi; Markab). *IV.* Al-Fard الفرد "the solitary one," $228^{\circ} 48'$ (α Hydræ; Alferd; Cor Hydræ). *V.* Jasad Kítas جسد قيطس "the body of the Whale," $109^{\circ} 7'$ (ζ Ceti; Batan Kaitoz). *VI.* Ad-Dulfin الدلفين "the Dolphin," $30^{\circ} 37'$ (β Delphini). *VII.* Bula' بلع "the Glutton," $32^{\circ} 28'$ (ϵ Aquarii. μ, ν, ϵ , Aquarii form the 23rd Lunar Mansion). *VIII.* At-Táir الطائر "the Bird," $18^{\circ} 40'$ (α Aquilæ). *IX.* Shamálí az-Zábih شمالي الذابح "the Northern (star) of the Sacrificer," $25^{\circ} 26'$ (α Capricorni. α and β Capricorni form the 22nd Lunar Mansion). *X.* Subail سهيل "the star Canopus," $181^{\circ} 58'$ (α Navis). *XI.* Fam Hút فم حوت for Fam al-Hút فم الحوت "the mouth of the Fish," $305^{\circ} 59'$ (α Piscis Australis; Fomalhaut). *XII.* Yamáníyah يمانية for Ash-Shi'ra al-Yamáníyah الشعرى اليمانية "the Dog Star of Yaman," $184^{\circ} 10'$ (α Canis Majoris; Sirius).

The small projecting plates $R R$ are the pinnules; they are parallel one to the other, and their height slightly exceeds their width; they are called the Libnatán لبنتان "the two tiles," and sometimes the Daffatán دفتان "the two boards of a book," or the Hadafán هدفان "the two archers' butts." Through each of these

pinnules is bored a small aperture or Thukbah ثقبه "hole," for observing the celestial bodies: the two holes together are called the Thukbatán al-Irtifá' ثقبتان الارتفاع "the two holes of altitude," the line joining the centres of the two apertures is parallel to the plane of the instrument. Lastly, *S* is the Murí مرى "index," or the plumb line.

The following inscription is inlaid in silver at *T*,—

تَمَّ عَمَلُ بِرَسْمِ الشَّيْخِ شِمَشِ الدِّينِ بْنِ سَعِيدِ رُئِيسِ
الْمُؤَذِّنِينَ بِالْجَامِعِ الْأَمْوِيِّ سَنَةَ ذَلِهِ
صَنَعَهُ عَلِيُّ بْنُ الشَّهَابِ

"Constructed for the use of the Shaikh Shams ad-Dín Ben Sa'id, the Chief of the Muazzins in the Jámi' al-Umawí (the mosque of the descendants of Umayyah¹), in the year 735 (A.D. 1334), by 'Alí Ben ash-Shiháb."

At *U* there are the words:—

نَقَشَ مُحَمَّدُ بْنُ الْغَزُولِيِّ
"Engraved by Muhammad Ben al-Ghazúli."

There are some words scratched in the space between *D* and the lower Libnah *R*, which have been so effaced as to be illegible. They evidently did not form any part of the original inscriptions, and are quite unimportant.

The second face of the instrument, with its inscriptions, presents the series of sines found in the species of quadrant called the Rub' ad-Dastúr ربع الدستور "Quadrant of the canon." *C* is the Urwah with its appendages. The arc *bf* is the arc of altitude, and is divided

¹ This mosque is sometimes called the Jámi' Baní Umayyah, and is the most remarkable of all the mosques in Damascus, both on account of its vast size and its architecture. Some authors say that it was built by the Emperor Heraclius; by others it has been considered to have been the work of the bishops of that See. It appears to be generally acknowledged that it was formerly the church of St. John in Damascus. It was entirely rebuilt by the Khalifah Walíd Ben 'Abd al-Malik in A.H. 96 (A.D. 714), and has since then borne the name of the mosque of the descendants of Umayyah. In the centre of the mosque there is a tomb containing the head of the martyr St. John, son of Zachariah; a relic equally venerated by Christians and Muhammadans. In the account of Damascus translated from the Kitáb Manásik al-Hajj by M. Bianchi, and inserted by him in the second volume of the Memoirs of the Geographical Society of Paris, p. 113, *et seq.*, there is a most interesting description and history of the Jámi' al-Umawí. The author of the Kitáb Manásik al-Hajj states, that when he wrote, in A.H. 1093 (A.D. 1682), there were no less than seventy-five Muazzins attached to this mosque.

into 90 degrees, numbered both ways by fives, each degree being further divided into two parts. The horizontal boundary line, or radius cf , is the whole sine; the perpendicular radius cb is the cosine. Each of these extreme radii is divided into 60 equal parts, numbered by fives both ways, each part being divided again into two, thus forming 120 divisions of each radius. From each radius 60 parallels or sines are drawn to the arc of altitude: those parallel to the whole sine being termed Mankús منكوس "inverted;" those parallel to the cosine Mabsút مبسوط "extended." Every fifth sine in the present instrument is inlaid with copper. In large instruments the sines are drawn from each degree of the arc of altitude both ways, i.e., perpendicular to each extreme radius of the quadrant, the sines both Mankús and Mabsút being of course 90 in number, and dividing either radius into 90 unequal parts, in which case the quadrant is termed nonagesimal; but in small instruments this is impracticable, since towards the extremities of the arc the divisions would become so minute as to be undistinguishable. Quadrants, where the sines are drawn from the radii to the arc, as in the present instance, are called sexagesimal. The three arcs, cf , dd , and ee , (the first two of which are inlaid with silver, and the last with gold,) appear to be inscribed as a convenient method of reading sines; the arc cf to a radius of 60° , and to a diameter of 60° ; the arc dd to a radius of 24° ; and the arc ee to a radius of 40° .¹

In the space marked C is the word Al-Jaib الجيب "sine," inlaid with silver. At d is the word al-A'zam الأعظم "greatest," and at B the word Kullí كلى "total," also inlaid with silver. The word al-Jaib requires no explanation, the other two have reference to the obliquity of the ecliptic. The terms al-Mail al-A'zam الميل الأعظم "greatest obliquity," or al-Mail al-Kullí الميل الكلى "total obliquity," signify the greatest distance between the equinoctial and the ecliptic, measured upon the solstitial colure.²

¹ See, however, M. L. A. Sédillot's remarks in the *Mémoires présentés par divers savants à l'Académie Royale des Inscriptions*, 1re Série, Tome I., pp. 68, 72, 84, 90. It seems possible, from what is there written and quoted, that the arc cf is that of the sixth unequal hour; dd that of the obliquity of the ecliptic; and ee that of the 'Asr.

² These terms appear to have been used, not only because they indicate the sun's greatest declination, or obliquity of the ecliptic, but also in distinction from the Mail al-Awwal الميل الأول "the first obliquity," and the Mail ath-Thání

At *c*, the centre of the quadrant, there is a hole pierced, which contained a portion of thread when the instrument came into my hands, and from which no doubt depended a Muri, or plumb line, applicable to this second face of the quadrant. There is also a similar perforation at *b*, which was possibly for the introduction of a third Muri, but there are no vestiges of it remaining.

میل الثانی "the second obliquity." 'Abd al-'Alī Barjandi, in his Commentary on the Prolegomena of Ulugh Bég, defines the Mail al-Awwal as the arc of a circle of declination, comprised between a definite portion or point of the ecliptic and the equinoctial in the nearest direction; the Mail ath-Thānī as the arc of a circle of latitude, comprised between the aforesaid point and the equinoctial in the nearest direction; and the Mail al-Kullī as the arc of a circle passing through the four poles (i.e., of the world, and of the zodiac—the solstitial colure) comprised between the ecliptic and the equinoctial in the nearest direction.

و قوسی از دائرة میل که مابین جز مفروض از منطقة البروج و معدل النهار باشد از جانب اقرب آن را میل اول آن جز کویند و قوسی از دائرة عرض مابین جز مفروض مذکور و معدل النهار از جانب اقرب آن را میل ثانی آن جز کویند و قوسی را از مارة بافتاب اربعه مابین منطقة البروج و معدل النهار از جانب اقرب میل کلی کویند

The first and second obliquities, when referrible to the same point of the ecliptic, form the two sides of a spherical triangle, having for its base an arc of the equinoctial, and for its apex the given point of the ecliptic: both obliquities have the same maximum, viz., the total obliquity.

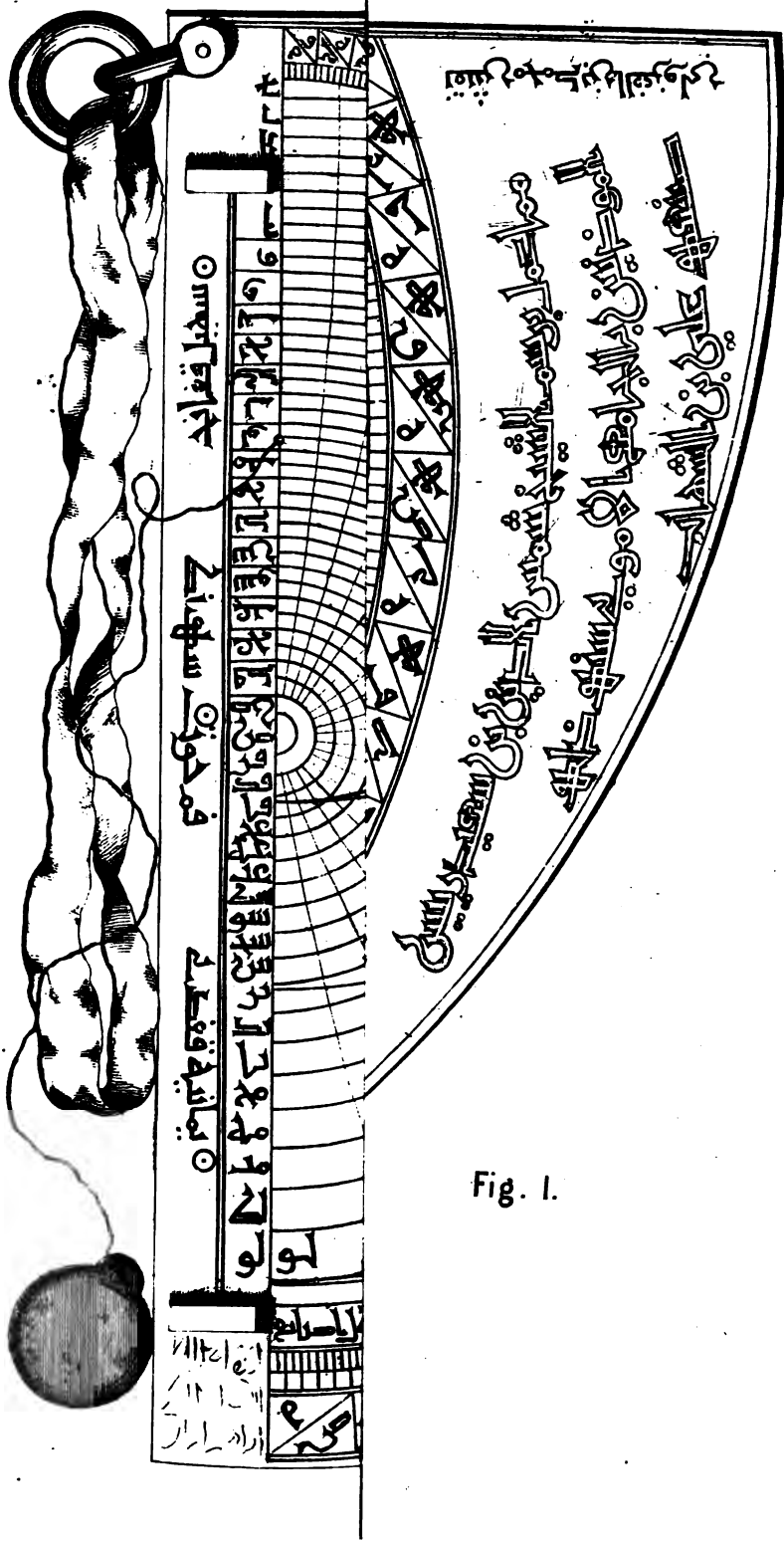


Fig. 1.

.

•

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

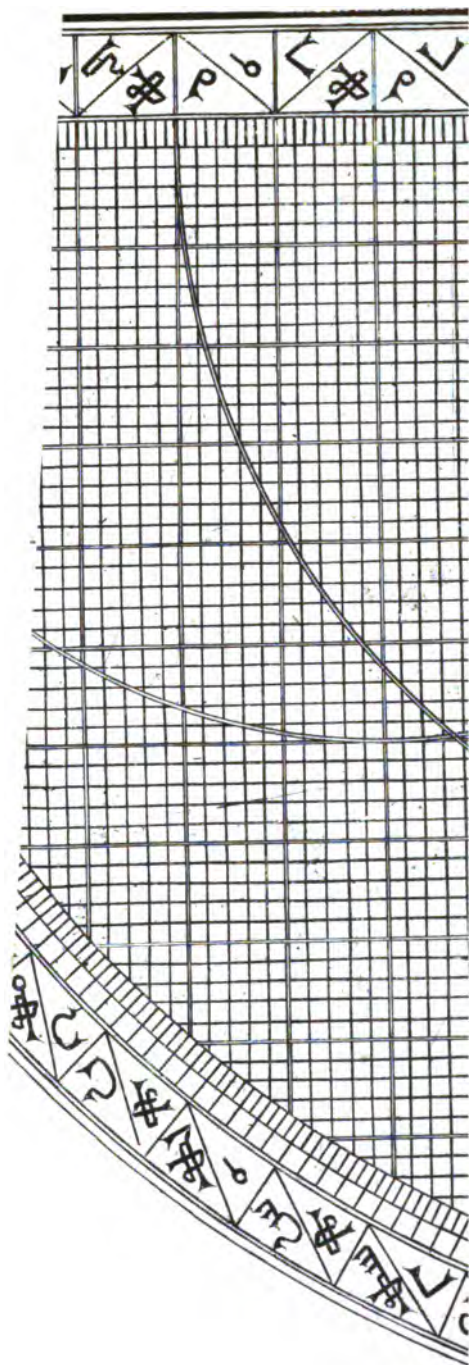
.

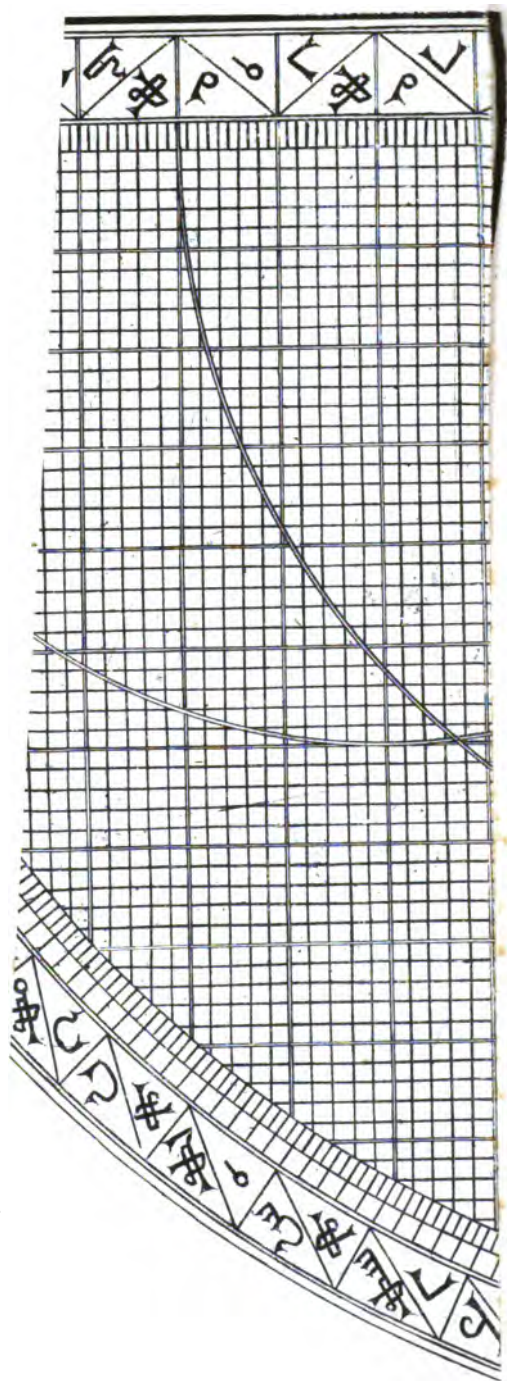
.

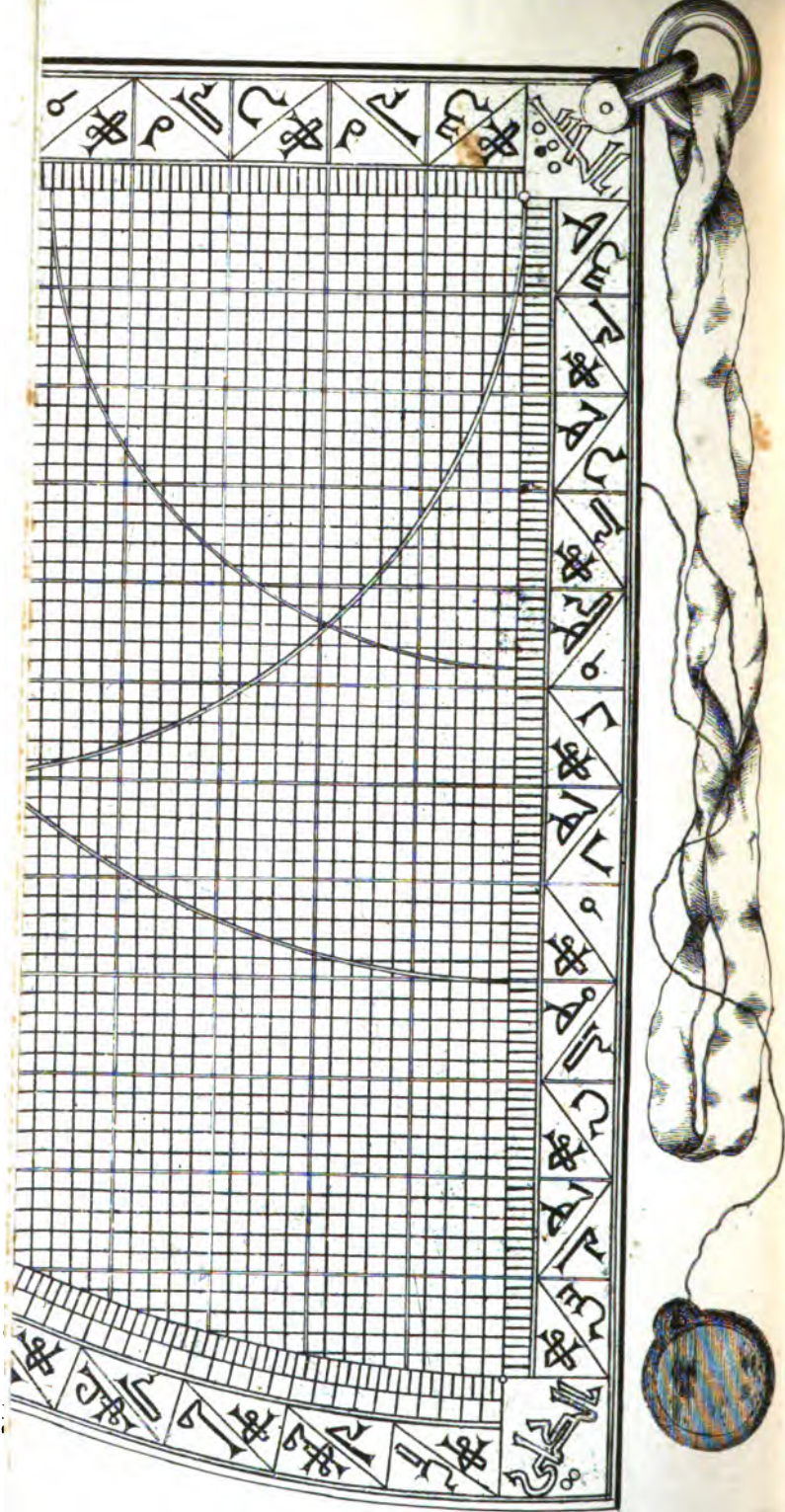
.

.

.







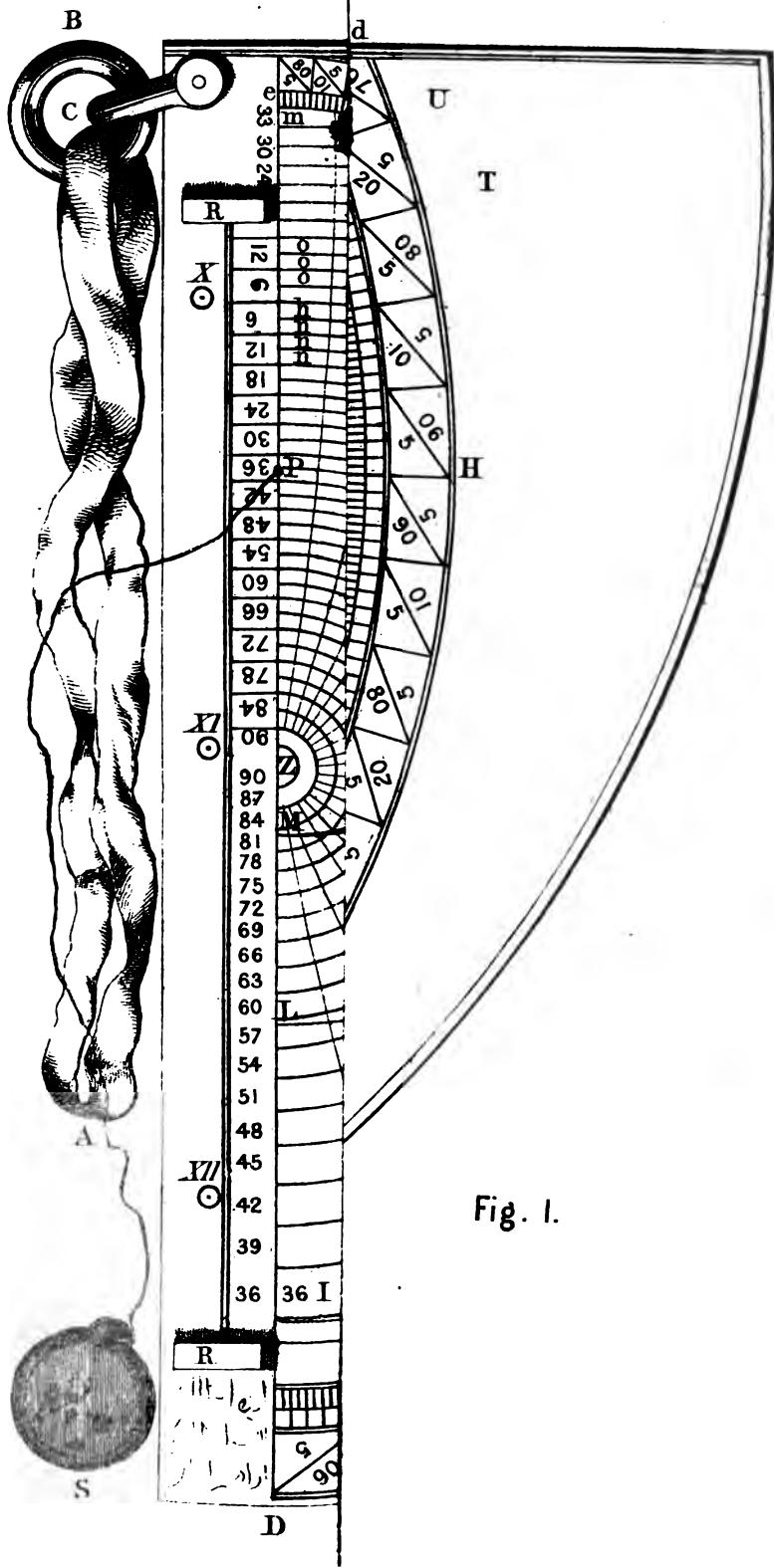
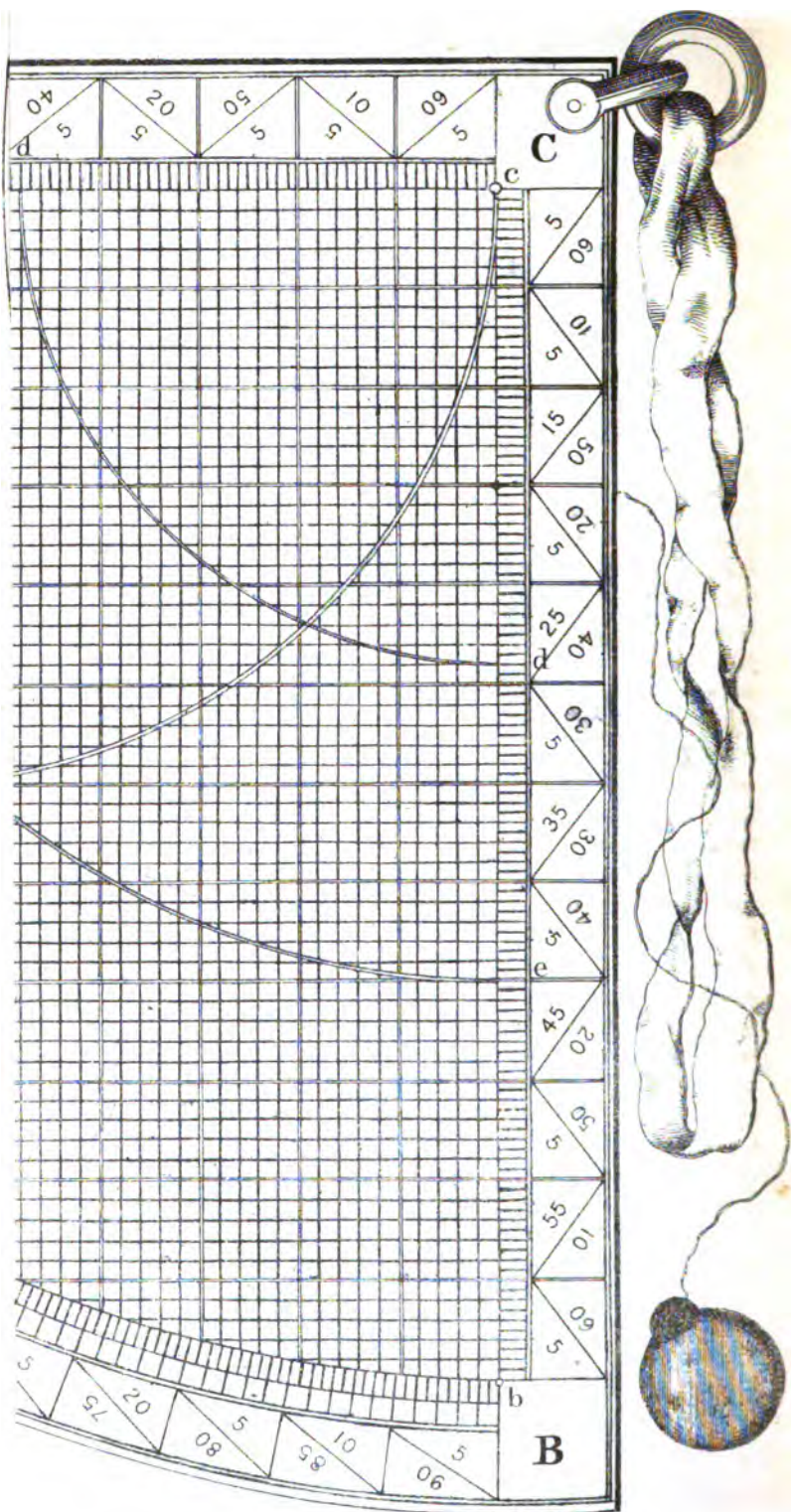


Fig. I.





ART. XVI.—*On an Ancient Inscription in the Neu-chih Language.* By A. WYLIE, Esq., of Shanghai.

[Read 4th February, 1860.]

AN indigenous record of the nomade tribes of Tartary, who shook the world with their conquests during the middle ages, would no doubt form an interesting episode in universal history. Although the Mongols made their power to be felt from east to west, comparatively little was known in Europe of their actual condition; but that little is sufficient to stimulate curiosity, and while the names of Genghiz and Tamerlane have gained a world-wide celebrity, very much that pertains to their people, as a nation and as individuals, is left to be filled up by the imagination. Tokens of former grandeur are still to be met with in the northern wilds, suggesting to the mind of the traveller a host of questions, which receive no satisfactory solution from the erratic nomades who inhabit those sterile regions. How many monarchies were overthrown by these children of the desert; how many kingdoms reduced to desolation; how many nations subdued, their power broken, and their inhabitants dispersed? Questions allied to something higher than the mere inquisitive faculty attach to some of these points; and, while we scan the *débris* of bye-gone generations, we are impelled by the conviction that all efforts in that direction are auxiliary to the more mature knowledge of the history of the human race.

Among the nations that succumbed to the Mongol sway, one not the least powerful was the tribe which held the supremacy in North China during the twelfth century, known as the Kin dynasty. The chiefs of this people had shown a remarkable power of development and adaptation to their altered circumstances. Emerging from the mountain wilds on the north-east of China, it was the care of the Neu-chih race, on first attaining imperial power, to frame a code of laws, institute officers and tribunals, and adopt those means which seemed most likely to secure their permanence. An astronomical board was established, and a new system of mathematical chronology invented. A board of history was appointed, and the annals of the empire thus

secured to posterity. Previous to this a new written character had been invented, under the special patronage of the first emperor, the very singular circumstances connected with which forms the occasion of the following remarks, for the information regarding which, as for many other kindred questions, we are altogether dependant on the Chinese records.

And here it is worthy of observation that the Chinese, although scrupulously adhering to their own peculiar ideographic written language from time immemorial, have also, from a very early period, been cognizant of various written systems used by neighbouring nations, of an alphabetic or syllabic character. Early intercourse with the Japanese has left no perceptible impression on the written language of the Chinese, while, in that of the former, the influence of the Chinese is sufficiently obvious. Not so the result of the Buddhist migrations from India ; they have left an indelible stamp on the literature of the empire. Piles of Sanscrit lore were translated into the native character ; much of the Hindoo philosophy and modes of thought have been rendered familiar ; a very extensive addition has been made to the number of the Chinese characters, and they have even succeeded in introducing a system of syllabic spelling. But, although the Devanagari alphabet, which is said to be the most perfect in existence, had been so long before the eyes of the scholars of the empire, we find no steps taken towards its adoption, in place of the time-honoured characters of China ; and now, after a lapse of thirteen centuries, there remain in China but a few vestiges of this character, in books, and on monumental tablets and vessels, without living expositors to throw light on the mysteries, which are thus rendered still more obscure. The Ouigours and progenitors of the Turkish nations were early in the habit of corresponding with the Chinese Court in written characters peculiar to their respective tribes. It is known that the Syriac alphabet was introduced into China so early as the seventh century, by the Nestorian missionaries. The frequent intercourse of the Arabs with China, from early times, would warrant the belief that the Arabian alphabet must have been long familiar to the eyes of the Chinese, especially during the Yuen dynasty, when they enjoyed a large share of the imperial patronage ; although it does not appear that they have ever done much towards the translation of their books into Chinese ; and, even to the present time, the greater part of the rituals and religious books of the Mohammedans are still in the Arabic character.

But besides the knowledge of foreign systems of writing in China, several alphabets have been produced, and have run their course,

within the limits of the empire, introduced at successive periods by various Tartar races who have gained a temporary ascendancy.

We cannot speak with certainty in this matter as to the achievements of the Topakwei Tartars, while they held rule in the northern parts of China, as the Northern Wei dynasty, during the fifth century of the Christian era, though there is ground to believe that they had a particular character for writing their original language. Thus we read in the history of the Suy dynasty,¹ that when the Wei Tartars took possession of Lo-yang, they were unacquainted with the Chinese language; and their emperor, Wan-te, gave orders to How Fo-how and Ko Seih-ling to translate the *Haou King*, or "Book of Filial Piety, into the Court language." In the bibliographical section of the same work² the names of nine other books relative to the language of that people are given. The names of three books on the language of the Seen-pei, a neighbouring tribe, are also preserved in the same place.

We know that the Tsi-tan Tartars, who established themselves in China about the middle of the tenth century, as the Leaou dynasty, had a peculiar alphabet; and as there was a close relation between it and the one we are now about to consider, it will be well to quote the short account of this writing as given by the Chinese, this being the only source from which we can gather any light on the subject. In Ma Twan-lin's great work, the *Wán hēn t'ung k'áu*, "Antiquarian Researches,"³ we read that A-paou-ke, the first emperor of the Leaou; having a great number of Chinese in his service, they instructed him, by an adaptation of the Chinese official hand with certain additions and contractions, to construct several thousand characters, and these were used to replace the wooden tallies which they had employed hitherto.⁴ The history of the Leaou dynasty further informs us, that in the 1st month of the year 920, on the 2nd day of the cycle, the formation of the Tsitan capital letters was commenced, and on the 14th day of the 9th month, being the 39th day of the cycle, the new characters having been completed, an edict was issued ordering their general adoption.⁵ The silence of history leaves us to conjecture as

¹ Book 32, p. 18.

² Book 32, page 22.

³ Book 345.

⁴ See also Rémusat's *Recherches sur les langues Tartares*, p. 77, and Translation of the *T'ing wan k'e mung*, Introduction, p. xviii.

⁵ *Leaou she*, "History of the Leaou Dynasty," Book 2, p. 1. The same passages are reproduced in the *Hung k'ien l'ih*, "Middle Age History," Book 202, p. 7, and the *Suh Wán hēn t'ung k'áu*, "Supplement to the Antiquarian Researches," Book 184, p. 31. These several quotations are translated into French, by Rémusat, in his *Recherches sur les langues Tartares*, p. 77.

to the result of this experiment. The only instance we find of the actual employment of these characters on record is on the 29th day of the 9th month of the year 924, when an imperial edict ordered the memorial tablet of the Emperor Pélh-gö to be rubbed down, and have his military enterprises recorded on it, in Tsitan, Turkish, and Chinese characters.¹ Future research may possibly discover some traces of this national literature in the northern parts of the empire, when a short vocabulary of the Tsitan language, which is inserted at the end of the *Leaou* history,² may be of some service in the deciphering of any such inscriptions. A glossary of this language is also to be found in the *Tszè hëö t'een*, "Canon of Written Characters."³

Remotely allied to the Tsitan Tartars was the Neu-chih tribe, who had been for some time gaining an ascendancy, and eventually became the successful rivals of the *Leaou* monarchy. The latter state came to an end soon after the establishment of the Neu-chih as the Kin dynasty, in the early part of the 12th century. The Neu-chih being still without any written character, a partial knowledge of the Tsitan, and also of the Chinese, was acquired from the people of those nations who had been taken captive by the Kin. Taking advantage of this circumstance, a scholar, named Kùh-shin, received orders from the Emperor Tae-tsou to invent a set of characters on the same principle as those of the Tsitan, and based on the Chinese pattern hand characters, but suitable for writing the Neu-chih language.⁴ These characters when completed were authorized by imperial edict, and ordered to be brought into general use, in the 8th month of the year 1119, on the 26th day of the cycle.⁵ In 1138, the Kin emperor, He-tsung, having invented a set of small Neu-chih characters, those which Kùh-shin had invented previously were termed capitals,⁶ and the small Neu-chih characters were published through the empire by an edict, on the 28th day of the 1st month.⁷ These were first brought into use officially in the 5th month of the year 1145, on the 55th day

¹ *Leaou she*, Book 2, p. 5; *Hung k'ien lü*, Book 202, p. 9; *Suñ Wän h'ien t'ung k'adu*, Book 184, p. 31.

² *Leaou she*, Book 46. A sample of these words has been translated into German, by Klaproth, in his *Asia Polyglotta*, pp. 194, 195.

³ Rémusat's *Mélanges Asiatiques*, Tome 2, p. 256.

⁴ *Suñ Wän h'ien t'ung k'adu*, Book 184, p. 31.

⁵ *Kin she*, "History of the Kin Dynasty," Book 2, p. 14; *Hung k'ien lü*, Book 214, p. 14.

⁶ *T'ung k'ien kang muh Suñ p'ien*, "Supplement to the General History of China," Book 10, p. 42; *Suñ Wän h'ien t'ung k'adu*, Book 184, p. 31.

⁷ *Kin she*, Book 3, p. 23; *Hung k'ien lü*, Book 215, p. 10.

of the cycle.¹ The *Suk Wán hēn t'ung káu* states, in a note, that the classics and histories of China were translated in this character. These are most probably now lost past recovery, but in a catalogue of the books in the Imperial Library at Peking during the Ming dynasty we have a list of fifteen books in the Neu-chih character, the last of which, called the *Neu chih tsé moo*, "Neu-chih Alphabet," would no doubt have thrown much light on the character of the Kin literature. As these fifteen works are probably all lost, it may be well to preserve the names of the others, which are as follows :—

Pwan kò shoo, "History of Pwan-koo."

K'ung foo tsé shoo, "History of Confucius."

K'ung foo tsé yén kwò chang, "Travels of Confucius."

K'ea yù, "Domestic Discourses."

K'ea yù hēn nāng yén yù chuen, "Discourses of the Wise and Able, from the Domestic Discourses."

K'ang t'at kung shoo, "History of K'ang Taé-kung."

Wò Tsé seu shoo, "History of Woo Tszé-sen."

Shih pā kwò tōw pāu chuen, Narrative of the Display of Rarities by Eighteen Kingdoms."

Sun pin shoo, "History of Sun Pin."

Shén yú shoo, "Treatise on Carriage-driving."

Hae tsēn kung shoo, "History of Hae Tseen Kung."

"*Hwang shé neu shoo*, "History of Madam Hwang."

Pih k'ea sing, "National Surnames."

Ha ta yang ár k' kan.

The only direct evidence which we have of the actual use of the Neu-chih character, besides the books, is in the existence of two stone tablets, which will be noticed in this paper. One of these was engraved during the Kin dynasty, and the other at the end of the Yuen.

The annals of the Ming inform us of the establishment of a translatorial office, in connection with the national collegiate institute, in the year 1407. The object of this office was to facilitate the transaction of diplomatic correspondence with foreign nations, and the incumbents were charged with the study of eight different foreign languages. One of these was the Neu-chih; and the others were the Mongolian, Tibetan, Sanscrit, Bokharan, Ouigour, Birman, and Siamese. An examination of the students took place in 1426, by the members of the Han-lin institute; and this practice was repeated at intervals, those who distinguished themselves being appointed to

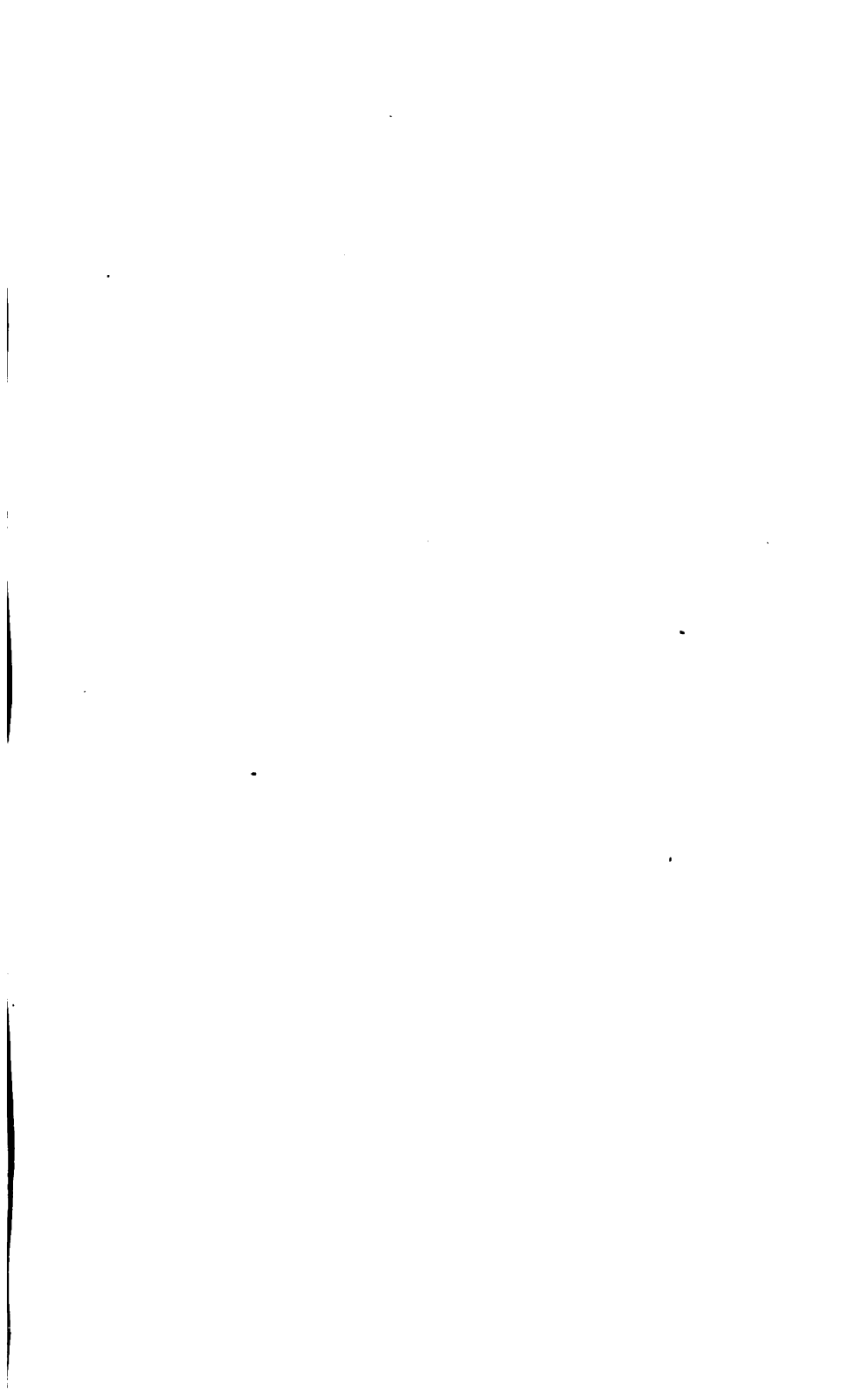
¹ *Kin shé*, Book 3, p. 27; *Hung kien shé*, Book 215, p. 13.

offices connected with the embassies. In 1470 a fixed number of interpreters were appointed for each of the nations above named; seven being the number determined on for the Neu-chih, but it was afterwards increased to nine.

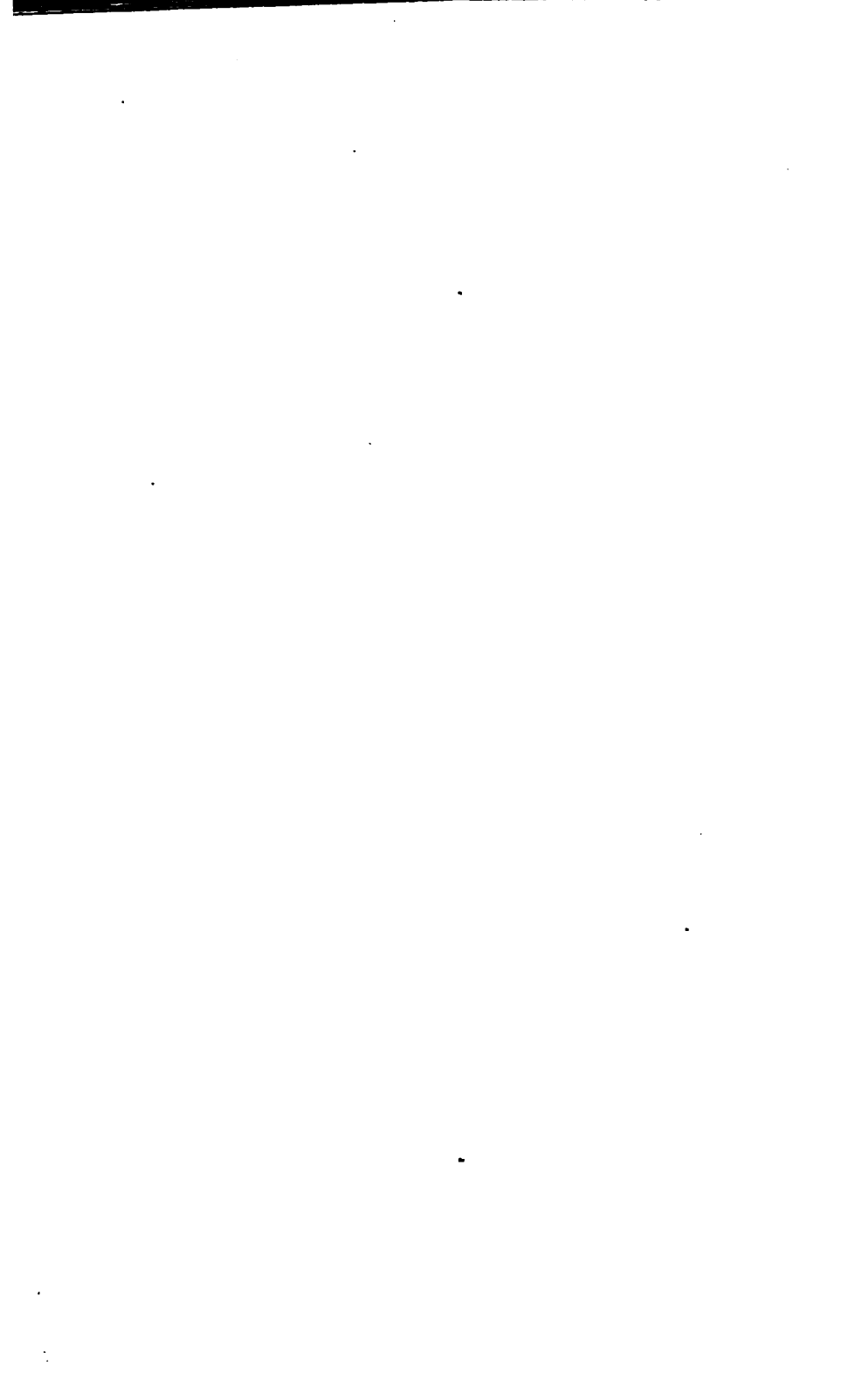
On the accession of the present Manchu dynasty, in 1644, we find they re-established this Translatorial Office, the same year, adding two sections in addition to the eight previously existing. These were the Pa-pih and the Pih-yih, two nations on the south-west of China. A president was appointed, and fifty-six professors; and the following year another section was added, consisting of thirty interpreters, for the tributary nations. In 1659 the section devoted to the Neu-chih language was suppressed, as also that for the Mongol.¹ The Manchus being actually descendants from the Neu-chih Tartars their language is almost identical, and it is probable that, by that time, the Manchu literature had already supplanted the Neu-chih character.

Most of the preceding facts were known to that singularly acute orientalist, Abel Remusat, when he wrote his *Recherches sur les langues Tartares*; but, not having seen a specimen of the writing in question, he was led to form an hypothesis, which must at least in part fall to the ground. On the 78th page of the work above mentioned, he says: "It is not impossible that the countries which were under their domination still contain stone monuments, with inscriptions destined to perpetuate the remembrance of treaties of peace, of decisive battles, and splendid actions. It is customary, in China, to erect tablets on such occasions, and the Tartars frequently conform to this practice. If any such could be found, with inscriptions in the characters of the Leaou or the Kin, we should be enabled to speak from knowledge, in deciding whether the Tartars had adopted the Chinese characters purely and simply, or whether they had subjected them to some such corruption as those alluded to above; whether they had adhered to what others had thought out before them, or whether they had themselves taken a step in advance in this career, which is open to inventive and perfective genius. For want of such decisive monuments, being unprovided even with such Chinese works as could supply the want in presenting us with syllabaries, with alphabets, or with words expressed in the characters in question, we are reduced to conjectures

¹ These details respecting the Office of Translators are taken from Rémusat's *Recherches sur les langues Tartares*, pp. 218-20, and *Mélanges Asiatiques*, Tome 2, pp. 248, 249. He quotes from a work called the *Pian-i-tian*, which I have not seen, and part of which is extracted from the, *Ming hway t'ien*, "Statistics of the Ming Dynasty."



大金皇弟都統經略郎君嚮呂疆場無事獵
于梁山之陽至唐乾陵殿廡頽然一無所睹
爰命有司鳩工修飾今復謁陵下繪像一新
回廊四起不勝欣懌與醴陽太守酣飲而歸
時天會十二年歲次甲寅仲冬十有四日
尚書職方郎中黃應期 省州刺史王圭从
行奉 命題



regarding the system of writing followed by the Tsitan and the Neu-chih."

After a careful examination of a considerable number of works on lapidary inscriptions, I can only find a record of the existence of two in the Neu-chih character. The first of these was erected in the year 1134, at the imperial mausoleum at Keen-chow, in Shen-se province; and a transcript of the same is to be found in a work of the Ming dynasty. As this is almost the only existing specimen of a lost (written) language it will be well to state the particulars with some minuteness. The work in which this curious piece is published is called *Shih mih tseuen hwa*, "Choice selections from lapidary literature," by Chaou Han, and is dated 1618. It is in eight books and contains nearly 300 inscriptions. It was reprinted during the present dynasty, in a collection, consisting of a new edition of 184 different works, in thirty packets, known by the name *E poo sou ke*, "Assemblage of rarities from the garden of arts." It was also reprinted in a reduced size, in another similar collection, about the end of last century called *Che puh tsuh tee ts'ung shoo*, "Repository of the knowledge of one's deficiencies." In this edition the inscription is printed so close that it is difficult to know how to separate the words from each other.

A transcript is given here, the size of the original work, together with a version in Chinese, which stands on the left of the Neu-chih inscription on the tablet.

The following is a translation of the inscription, according to the Chinese version :—

"The local military director and prince of the blood, brother to the emperor of the Great Kin dynasty; having enjoyed a season of tranquillity within the boundary of his jurisdiction, was hunting on the south side of Leang Hill. On coming to Keen-ling (the imperial sepulchres) of the Tang dynasty, finding the pavilion and side buildings in a state of decay, every vestige of magnificence having disappeared, he gave orders to the local authorities to assemble artisans to repair and beautify the place. Now having again visited the sepulchres, finding the paintings all renewed, and the side galleries completely restored, he was inexpressibly delighted, and returned after partaking of an entertainment by the Prefect of Le-yang.

"T'ŕen-hwuy, 12th year (A.D. 1134), being the 51st year of the sexagenary cycle, 11th month, 14th day, Hwang Ying-ke, Territorial Secretary to the Supreme Council, and Wang Kwei, Secondary Prefect of Yew-chow, members of the suite, have written this in compliance with the command.

"Translation of the preceding inscription."

The heading to the tablet reads—"Record of the journey of the military director and prince of the blood, the emperor's brother."

The author of the *Shih mih tsuen hwa* adds the following note:—"This prince of the blood is called the brother of the emperor, but no name or surname is mentioned. As the date is 1134, it should be the brother of T'aé tsung. According to the history of the Kin dynasty, She-tsoo had eleven sons, there being eight besides Kang-tsung, T'aé-tsoo, and T'aé-tsung, it is uncertain which is the one referred to. We cannot decipher a single word of this inscription, which is written in the Neu-ch'ih character. This table corroborates what Wang Yuen-mei says—'When enlightened princes are watchful over their virtue, foreigners are attracted from every region.' There is a translation at the end, in the Chinese character, consisting of one hundred and five characters, inscribed on the left side, but it is entirely different. The engraved inscription is at Keen-ling, on the characterless tablet."

One Le Kwang-ying, a native of Kea-hing, published a descriptive catalogue of the impressions from inscriptions in his possession, in 1729, entitled *Kwan meadu tue tsang kin shih wän kadu lëü* "Examination of the metal and stone inscriptions preserved in the Chefs-d'œuvres Cabinet." On the 4th page of the 15th book we find the following:—

"Record of the journey of the local military director and prince of the blood, the emperor's brother.

"This is written in the national character of the dynasty.

"At the end is the following subscription:—'T'ëen hwny, 12th year, being the 51st year of the cycle, 11th month, 14th day, Hwang Ying-ke, Territorial Secretary to the Supreme Council, and Wang Kwei, Secondary Prefect of Yew-chow, members of the suite, have written this in compliance with the command.'

"There is also the following subscription:—'Signature of Fan Chung-gan of Ching-too, in the year 1633.'

The *Kwan-chung kin shih ke*, "Record of the Metal and Stone Inscriptions of Shen-se," by Peih Yuen, published in 1781, notices this inscription, on the 1st page of the 7th book, as follows:—

"Record of the journey of the military director and prince of the blood, the emperor's brother.

"Erected in the 11th month, A.D. 1134. The first part is written in the Neu-ch'ih character; the latter part is a translation written in the ordinary character; the heading is in the seal character. At Keen-ling, in Keen-chow.

"This is engraved on the characterless tablet at Keen-ling, as

follows :¹—‘We find on examination, that in the year 1131 the Kin gave the region of Shen-se to the house of Tse, so that at the date in question this territory belonged to Lew Yu, and while Lew Yu was thus Emperor of Tse he was guarded and protected by Ta-lae as army inspector. Ta-lae was the son of Muh-tsung, and the brother of T’ae-tsung. In the inscription it is said “the emperor’s brother,” but no name is given. Comparing this with history, there is no doubt that Ta-lae is referred to.’”

The *Tsēn yen t’ang kin shih wānpa wei suh*, “Supplement to the Tsēn-yen hall Appendices to the Metal and Stone Literature,” also notices this inscription, on the 1st page of the 6th book, as follows:—

“Record of the journey of the military director and prince of the blood, the emperor’s brother.

“A.D. 1134, 11th month.”

“In the preceding record, the former part is written in the Neu-chih character and the latter part is a version in the Chinese character. The inscription speaks of the military director and prince of the blood, the emperor’s brother, but it does not give any name. Some students of inscriptions consider this to be Tsung-foo; but Tsung-foo was the son of T’ae-tsoo and nephew of T’ae-tsung, and as the inscription was engraved in the time of T’ae-tsung, he could not be called the emperor’s brother. Some consider it to be Ta-lae; but on examining the imperial records and the biographies in the History of the Kin, we find that Ta-lae was not in Shen-se at that time. I conceive this prince of the blood to have been Sa-le-hö. Sa-le-hö belonged originally to the royal house of the Kin, and being the foster son of She-tsoo, he was brought up as a brother of T’ae-tsung, and ought to be designated the emperor’s brother. In Le Sin’s Narrative of Important Events for the year 1130, it is said—‘In the 10th month of the year 1131, Tsung Peih being defeated by Woo Keae, he returned from the east of the river to Yen-shan, when the Assistant Commander-in-Chief, Tsung Wei, detained Tsung Peih in the camp, and appointed the Assistant Military Director, Sa-le-hö, to be Commissioner for Military Affairs in Shen-se.’ Thus the expression on the tablet, Local Military Director, exactly corresponds with the Narrative of Events; for he was promoted, from being Assistant Military Director, to be Principal Military Director. The Narrative of Events further says, ‘When Loo Peih led on the troops to an assault, and was defeated by Woo Keae, Sa-le-hö was seized with alarm and shed tears, in consequence of which the Kin people called him

¹ The inscription in Chinese, down to the date, is given here.

the Weeping Prince of the Blood.' So that Sa-le-hö originally had the title of Prince of the Blood. This event is not narrated in the History of the Kin ; but, besides this matter of the Local Military Director, there are very great omissions in the History, which must be supplied by the Narrative of Events and the lapidary inscriptions. Sa-le-hö's name is now written Sa-le-kan."

Such are the few particulars I have been able to gather regarding this stone, and an examination of the character permits me to add very little more, for I confess it has resisted all the efforts which I have been enabled to apply towards its resolution. I have little hesitation, however, in saying that it is an actual version in another language, and not a mere transcription of the Chinese sounds. One reason for this conclusion is that, while the Chinese characters are 105 in number, the words of the Kin are only 94 ; besides which I see no conceivable collocation of the strokes which can make these words correspond to the sounds of the Chinese, or anything near it. I conceive, further, that the translation cannot be a very literal one, in consequence of the shortness of the Kin version. This opinion is founded on the fact that the present Manchu, which is a direct descendant of the Kin, is much more diffuse than the Chinese, and in all bilingual inscriptions the Manchu words greatly exceed the Chinese. It would be necessary, however, to know something of their principles of literary composition, before deciding too positively ; for, under the circumstances in which their literature took its rise, we are not authorized to look for a high degree of perfection ; and the thought has occurred, as a possibility, that the particles and inflexions may be omitted. The few specimens which I have found of the language in Chinese books, are not calculated to throw much light on this point.

One of these authorities is a short vocabulary of the Kin language, called *Kwö yu keae*, at the end of the *Kin she*, "History of the Kin dynasty." The greater part of this was translated into German by Klaproth, in his *Asia Polyglotta*, pp. 292, 294. I have also given an English translation of it, in the Introduction to the Translation of the *Tsing wän kě mung*, pp. lxxv, lxxx.

In the *Tszé hěö tšen* there is also a glossary of the Neu-chih language, which was published by Visdelou, in the Supplement à la Bibliothèque Orientale, p. 257.¹ The same was republished by Langlès, in his *Alphabet Mantchon*, third edition, pp. 38, 39, which also gives the corresponding Manchu words.

A much more extensive work, in a number of volumes, was pub-

¹ *Mélanges Asiatiques*, Tome 2, p. 256.

lished at Peking, in 1824, entitled *Kin ting Kin she yu keac*, "Explanation of words in the Kin History, published by Imperial authority." The greater part of the words in this work belong to the Neu-chih, though a large portion of them is also from the Mongolian, Tibetan, Sulu, and other Tartar tongues. The words, which in the Kin history are given in the Chinese character, are here written in the Manchu character also, the explanations being all in Chinese.

The transcription of a few proper names in the Neu-chih character might afford a clue to the alphabet; but it is possible the names on the tablet are not transfers of the sound, but translations of the sense, as we find most of the proper names are translated in the two works above mentioned. Thus, *Kin*, the name of the dynasty in Chinese, signifying Gold, is given, in the Kin history, as *Gáu-chüh-hòè*, and *Gáu-ch'un*, and also *Gacsin*, each of these words signifying Gold or Metal in the Neu-chih language, the latter being also the word used

in the modern Manchu language, , *Aisin*. Again, the Chinese

surname, *Wang*, which we find at the end of this inscription, is translated in the above vocabularies in the Neu-chih, by *Wán-yen*, or, rather, this latter is given as the equivalent in Neu-chih. The Chinese surname, *Shang*, has *Woo-kòè-lún*, for the Neu-chih equivalent, and so on; the author of the Kin history remarking, at the end, that it would be a difficult task to give all the surnames, as the Chinese equivalents were arbitrarily adopted by the respective families. Such being the case with regard to proper names, it is possible, that the examples on this tablet are not transfers of the sound, but the Neu-chih equivalents, and thus we are deprived of a key which has proved the most important auxiliary in recovering the lost written languages of Egypt and Persepolis.

Again, the fact that there were two systems of characters in use, while we are not informed as to the particular application of these respectively, involves the question in still greater perplexity.

It remains to notice the hypothesis of Rémusat, which is deserving of attention for its ingenuity, and, it may be, is not entirely devoid of foundation. He considered there was ground to believe that the writings of the Leaou and Kin dynasties were essentially the same, and that this was nothing more nor less than the present Corean written language, it having been transmitted to the present day by that nation, formerly the immediate neighbours of the Leaou and Kin Tartars. The inscription now before us furnishes the answer, in part, to this theory, inasmuch as we see by it that the Kin alphabet is cer-

tainly not identical with the Corean ; still I think there is reason in the suggestion that the Corean may be the written language of the Leaou Tartars. The appearance of the character, compared with the account of that of the Tsitan, given in the Chinese history, seems to favour this supposition. That account tells us the characters were formed by a modification of the Chinese *le-shoo*, or what has been termed the official hand ; and it does not require a great stretch of fancy to trace a resemblance between the elements of the Corean writing and the Chinese characters of the Han dynasty. The form of the grouping of the Corean characters also corresponds with those on the Kin tablet ; and this may form an important hint, in any attempt to unravel the contents of the latter. The order of sequence observed in the elements of the Corean words is, first, top left hand, then right, and lastly below ; and the presumption is that the same rule applies to the Neu-chih writing.

The annexed specimen of Corean writing, from the *Lung wei pei shoo*,¹ will show the analogy between it and the Kin writing. The interlinear column on the right is the original document in Chinese, of which the other is merely a transcript of the sounds in the Corean character.

The following lines contain a transliteration of the Corean alphabetic characters :—

Song ts'am koon O Tsä ngoo tai hyong t'yon työ.

Hook yoo toong oi in moo i ha pyoor rak t'i k'i tyoi hyong ha p'ir
poon Tsou Wor

Kan tam mai syang tayo ping ho ngong han woir wi wok kak nga
wey t'a tsyoo pookoon tsyor

Pang kwi koo toong lyoong ko ts'a syong li kyoi kwan ha lo hom
he ts'yoo kyo pang k'hai tsir

Ts'o ko sin hang ts'yoo moo lyong ts'oo hoi t'yor toong ngyoo
syang ngyong pyong hae kyö ir syoo hyor

Syong pang so ngyon ts'a kak sin to tsaoon syor moor hyam koo
ngi soo myan syoon tsang moo ts'yor.

TRANSLATION.

*Presented to my esteemed Brother, the Military Adviser, Woo-Tse-yu,
on his return to China.*

Although there are the central and outside nations,
Yet it is vain to distinguish men as natives and foreigners :

¹ Part IX, Division 3, Book 4, p. 1.

*Scrimin presented to a Chinese Envoy to Corea,
on occasion of his return.*

送參軍吳子魚大兄還天朝

去姑立至不計別松站垣血

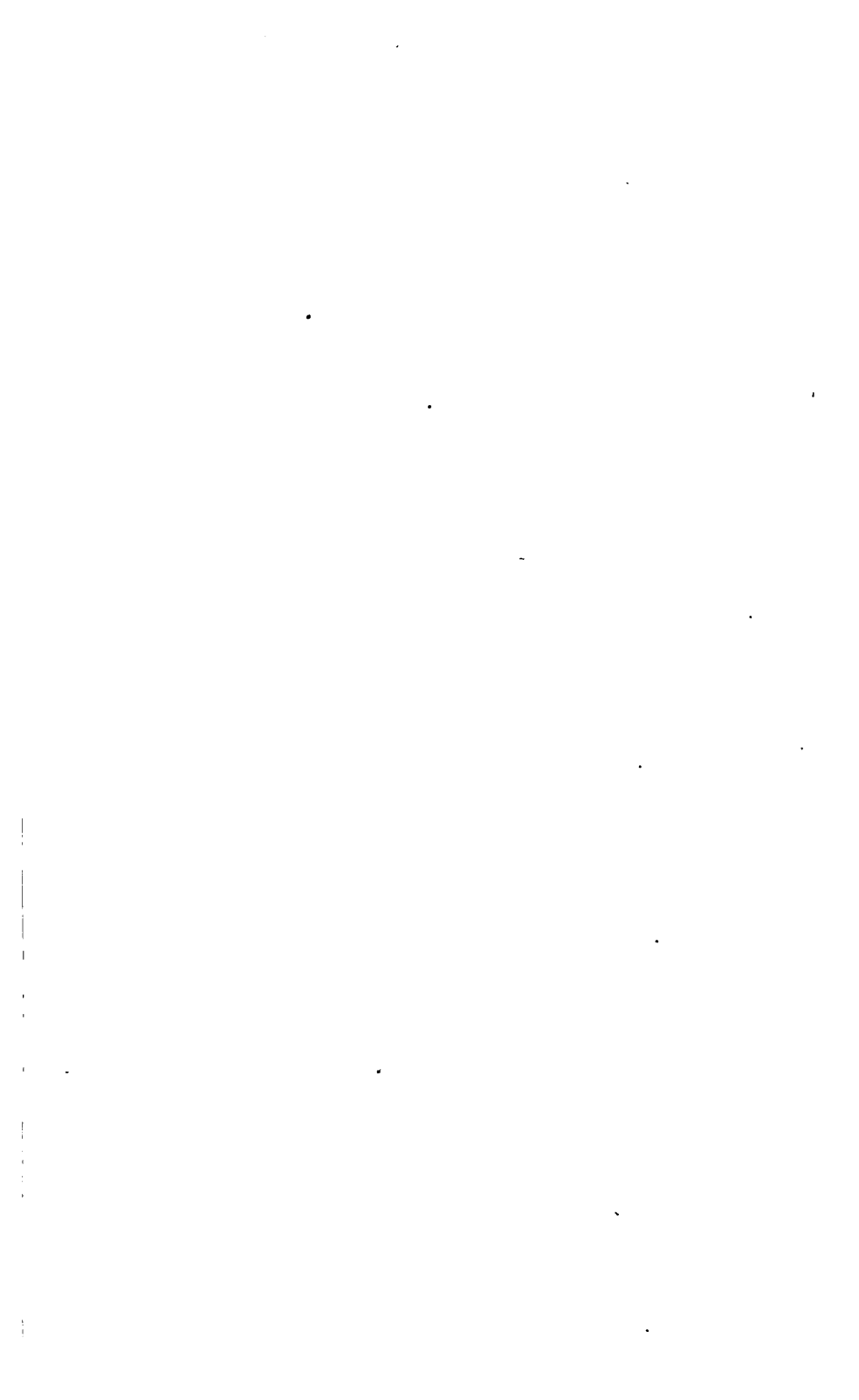
國有中外殊人無羈夏別落地皆第兄何必分楚越
号弁岳幻 此早公补班比比不内松云聖县純

肝膽每相照永壺映寒月倚王覺我穢唾珠復君絕
止沾只皆立以至以祉能到去巧公訓以弁粵古冠

方期久登龍遠此成離訣關河路險巖秋郊方觸熱
壯子子去岳列初似公訓以公姑刻奪且堪出炮

此去慎行休毋全阻回轍東陸尚用兵海嶠日疏血
初州化云弃早以不剋毘云弁生岳睨引且炮弁提

須馮魯連子却秦掉寸舌勿嫌九羈陋勉狗壯夫節
从从乍已不朽化岳委信量姑子公今咀云松早莖



All mankind enter the world as brethren,
Then why draw a line between Tsou and Yue.
Our intimacy is that of the inmost heart,
Reflected like the winter moon on the icy pool.
Under the influence of your virtues I become conscious of my imperfections,
While your pearly productions reiterate your rare attainments.
Henceforward I had hoped long to enjoy your company,
But now, of a sudden, I am called to bid you farewell.
Through passes and rivers dangers beset your way,
And the mild air of autumn no longer pervades the fields ;
Now, on your departure, be careful when you travel and when you halt,
That no obstacle may impede you in your homeward journey.
On the eastern border the military are still up in arms,
And the seaboard is deluged with the blood of the slain.
The country wants another Ping Loo-leen
Who could divert the soldiers of Tsin by the power of his tongue.
Do not harbour suspicions regarding the rudeness of barbarians,
For they can apply themselves to fulfil the duties of life with credit.

It has been objected to the above theory that the Corean alphabet is far too systematic, and presents too striking a resemblance to the Devanagari, to have been the production of the Tsitan, and that it is more probable to have been imported from the west, by the propagators of the Buddhist faith. There is force in this objection, but not such, I think, as to overthrow the hypothesis in question ; I would rather extend the doubt, by supposing the improbability of this Tartar tribe having spontaneously excogitated an alphabet for their language ; and as we are informed by the history that they were indebted for the suggestion to their Chinese captives and refugees, I see nothing forced in the supposition that among the latter were to be found Buddhist priests, having a knowledge of the principles on which were constructed the written languages of India and Tibet. On the contrary, this seems an easy way of accounting for what otherwise stands out as a difficulty in the case ; and, while there is an obvious analogy between the Corean alphabetic system and the Devanagari, I would hesitate before receiving this as an evidence against its identity with the Tsitan. A fact which would favour this view is recorded in the history of Kublai khan, who commissioned the Lama priest, Saadja Bandida, to perform a similar office for his dynasty, the same order

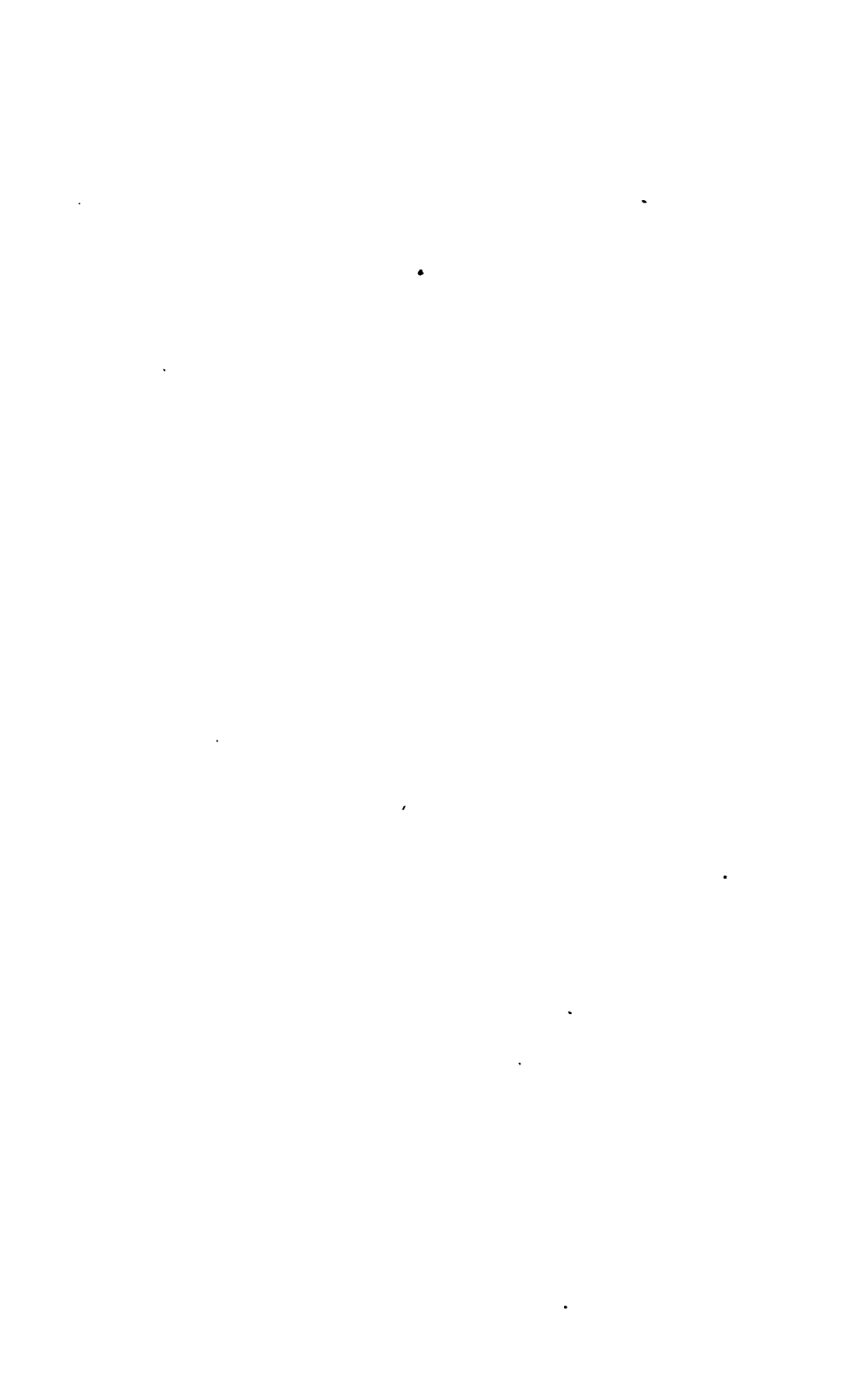
having been also transmitted to his successor in office, the Tibetan priest, Baschpa.

Granting, then, that we are enabled thus to identify the Tsitan character, I am not prepared to believe that the more recent Neu-chih character is really a step in advance. A seed of national independence or, it may be, vanity, seems to have contributed to the desire for a character peculiar to their tribe, as we know that, on a later occasion, the Mongols of the Yuen dynasty were prompted by such a feeling. Their inability fully to appreciate the capabilities of the alphabet of their neighbours may also have exercised an influence in the same direction, for it is probable that the Tsitan and Neu-chih were cognate dialects. In the absence of more direct evidence, therefore, I would infer that the Neu-chih is rather a *dégradation* than an improvement upon the Tsitan. Such as it was it seems to have been known and used for many years after; for we find Kublai khan stating, in his edict, regarding the alphabet of Baschpa, as one of his reasons for the invention of a new character, that the Leaou and Kin had characters peculiar to their respective nations. I find it also stated, in a Chinese book on inscriptions, that there is, at Keu-yung-kwan, on the Great Wall, a stone tablet, erected during the Yuen dynasty, in the year 1345, with a Buddhist sutra inscribed on it in five different kinds of characters, *i. e.*, the Mongolian, Ouigour, Neu-chih, Sanscrit, and Chinese.

Annexed is a table of the elements of the Neu-chih writing, derived from an analysis of the Kin tablet, by which it will be seen they are almost all component parts of the Chinese *keae shoo*, or what has been called the pattern hand; but it is still doubtful if this subdivision is in accordance with the laws of Neu-chih orthoepy; for there is not one of them of which I can find a key to the pronunciation, and it is only some three or four of the words to which I can affix the interpretation with any great probability. There is no indication of a distinction of the characters as initials, medials, and finals, on the principle of the Arabic and Tartar alphabets, for we find the same form of character occupying each of these positions in the various combinations.

To recapitulate the principal facts above alluded to:—We have here an inscription in an unknown character, professing to be a facsimile from a stone tablet of the period of the Kin dynasty, erected at the imperial tombs of the Tang dynasty, at Keen-chow, in Shen-se. A translation, in Chinese, is given by the side; a note in the work in which it is preserved informs us that it is in the Neu-chih character. This work has been twice reprinted, in different collections. The

卡多火凡火雨令井人左坐主禾
 变苗荒夫予口才卜大七牛考及平乙及内九亦兮
 川立反火力马亦已由上马已曲凡ノく了乃牛而
 广生火甘爰之し米田水以出谷入田出列又又十
 出又才士兴气九出方水田今九火个丙太工交乃
 友戈内共木本乃人斗冠内爰土イ夫避弓一坐夫
 口又山后女市巫市采方而シ勾垂八千九同半兮



authenticity of the inscription is vouched for, by being noticed and commented on in a number of other works on inscriptions. We learn from history that the Neu-chih had a peculiar written character for their language. There is reason to believe that an analogy exists between the method of this written language and that of the Korean. The aids we have for the recovery of the Neu-chih language are a vocabulary at the end of the Kin history, and an imperial work lately printed, explaining all the foreign words in the Kin history. The general resemblance between the specimens of the Neu-chih language thus handed down to us, and the modern language of the Manchus, is so close as to afford the prospect of considerable assistance from the latter source, in any attempt to decipher the contents of the tablet.

Such being the data, there still remains a large residuum of difficulty to be overcome, in order to arrive at the true elements of this written language. But, as there is another inscription known to exist in China in the same character, and which is probably a phonetic transcript of Chinese or Sanscrit sounds, could an impression of it be procured there is reason to believe it would afford the key necessary to the complete analysis of the composition.

SHANGHAI, 27th May, 1858.

ART. XVII.—*On the Cotton Trade of India.* By J. A. MANN, Esq., F.S.S.

[Read 21st January, 1860.]

THE great and increasing importance attaching to the question of Cotton supply renders any remarks which may throw light on the subject, of peculiar interest; the fact that the value of our cotton manufacture now exceeds sixty million pounds sterling annually—consuming therein upwards of four hundred thousand tons of the simple fibre—employing nearly one hundred million pounds sterling of capital—and giving employment directly and indirectly to about four millions of our countrymen, is alone so startling and withal so colossal as almost to defy comprehension. That a fibre so simple, and with us but a century since so little known and appreciated, should now give rise to such wealth and comfort, almost partakes of fiction; and one knows not how sufficiently to praise the ingenuity of Wyatt, Kay, Hargreaves, Arkwright, and Crompton, who led the way to raise the manufacture in little more than a century to its present prodigious proportions. But the extension, not to say the sustenance, of this trade, is primarily dependent upon the supply of the raw material: upon this, the one hundred millions of our capital, and the livelihood of near four millions of our countrymen is dependent, a matter so serious and of such magnitude, as to make the question one of the State; the appalling result only contemplated of one year's stoppage of the supply, is sufficient to force a dread of the slender basis upon which the magnificent fabric depends. Our legislators are however now fully alive to its importance, and it is pleasing to mark the attention the matter receives amid the turmoil of our immense governmental affairs.

The race for supremacy in trade is now so energetically joined in by many of our Continental neighbours, and our Atlantic cousins, that it is more particularly desirable our supply should be capable of equal progression; any tendency to a deficiency must so check the trade as inevitably to involve a very wide-spread loss, and the only manner in which the certainty can be assured, is in the liberal encouragement of the cultivation in our colonies, and in brief to have as many sources of

supply, to guard against the risk of a local failure. A glance at the statistics on the subject will be sufficient to indicate its possibility—if we observe the falling off in supply in the years 1886 and 1887, caused by the failure of the crops in the United States, and remark the comparatively large stock held at that period, which meliorated its effects; we will discover the same warning indications in the preponderance of demand over supply in the years 1854, 1855, and 1856; and though our hopes seem now well grounded of a more regular and certain supply, we must not forget that the effects of any revulsion which may possibly arise, will be the more severe, from the increased interest at stake: and that the present condition of our stocks is such as not to warrant on our part any prodigality.

It is not, however, the question of demand with which we have to deal, but with that of *supply*. Attention has lately been directed to many sources, each enjoying peculiar claims to attention, but it is generally acknowledged that our more immediate wants must be supplied from our Indian possessions, though I am glad to be able to state that Africa is now making rapid progress to become a source of extensive supplies, and time must decide their relative abilities and merits; the general impression appears to be that when the resources of India, as those of Africa, come to be developed, they will be able successfully to compete with the United States of America in our markets, and furnish us with such quantities of the article as will meet not only our immediate requirements, but any prospective increase for a long period to come.

India is, according to our knowledge, the accredited birth-place of the cotton manufacture. In one of the hymns of the Rigveda, said to have been written fifteen centuries before our era, reference is made to *cotton in the loom* there, at which early date therefore it must have acquired some considerable footing; and it seems probable that the process of spinning and weaving was carried on at the earliest date of which we have any record, in much the same manner as it is there in the present day; the strictly conservative character of the Asiatic—the profusion of labour in the present mode of manufacture—the primitive form of implements—and the carelessness of the cultivation, all tend to this view; whether the quality of the native cotton has improved or deteriorated is a matter of doubt, but this is certain, in former times large irrigation works existed there, and equally so that the poorer cultivator is by a combination of circumstances in the present day considerably imposed upon by his superiors either in power or pecuniary advantage.

Considering the disadvantages of their primitive mode of manufacture, it is somewhat a matter of admiration that the natives of

India should have arrived at such exceeding proficiency in the delicacy of the fabrics manufactured by them. Muslins (so called from Mosul, in Mesopotamia,) were among the earliest articles of foreign trade in the East; those manufactured by the natives, particularly at Dacca, where the trade reached great excellence, are still unsurpassed in fineness by either our hand or machine-wove fabrics. Taverner said "they are so fine that you can scarcely feel them in your hand," and that they were wove from thread of such extraordinary delicacy, that a single pound of cotton was spun for it into a length of 250 miles.¹ Though the manner in which this wonderful delicacy of texture was wrought is very surprising, it is not astonishing that the natives of India should have excelled in the manufacture. In such a climate the delicacy and fineness of the garment must necessarily have been of first consideration, and when we regard how greedily fabrics eminently combining these qualities must have been sought after by the wealthy and licentious nobles of India, not fallen India of modern times, but the India of poetry and romance, of splendour and glory! every stimulus to excellence in this direction must have been afforded by their luxurious mode of living, and their vanity. Utility and economy were to be the characteristics of the energetic and thrifty European, but to the Asiatic no expenditure of labour or material was too great that could add in the slightest to his wishes in this respect.

The earlier condition of India and its cotton manufacture are fields for speculation; to attempt any conclusive argument on the subject would be mere empiricism, but the opinion may be ventured, that at the climax of the former greatness of India, the population would not have been less than that of the present day, or indeed it may for some period past have even diminished, and our knowledge of their social, moral, and religious institutions support me in this—during the period in which those circumstances existed which wrought its downfall, the people of India as a whole must undoubtedly have been considerably impoverished, and this would not only tend to check an increase of population, but also to diminish the demand for cotton manufactures; the long period for which the manufacture has existed there to our knowledge, should, under a prosperous condition of the people, have given rise to a greater consumption, and if any testimony were required of the antiquity of the trade and of its proportions, perhaps the fact that the plant is now found throughout all India, is as conclusive as any. In these surmises is not, of course, embraced the period in which India

¹ To prevent misconception, it may be remarked here, that Messrs. Houldsworth's of Manchester, have *spun* yarn nearly equal to 400 miles to the pound.

has been under the civilizing auspices of the British government—the progress which civilization has made in that period has doubtless raised the energies of the people, and caused an increase in the consumption of cotton goods.

Of the origin or extent of the earlier export trade of India, and afterwards of China, little more is known. We have reason to believe that five centuries before our era, cotton was exported from India; for in the reign of Amasis 569–525 years B.C., cotton was known in Egypt, where, it is not probable, any then was grown. Herodotus, writing 445 B.C., speaking of the usages of the Indi, says, (lib. iii, cap. 106), “the wild trees bear fleeces for their fruits surpassing those of the sheep in beauty and excellence, and the natives clothe themselves in cloths made therefrom,” and (lib. iii, cap. 47) calls it *tree-wool* (ἐρίον ἀπό ξύλου). From India the manufacture seems to have reached Persia, where, according to Strabo, (lib. xv,) who died A.D. 25, in Susiana, a province of Persia, at the head of the Persian Gulf, it grew and was manufactured into cloth. At the Christian era the growth and manufacture were carried on in Egypt, and Pliny (Hist. Nat. lib. xix, c. 1), mentions, A.D. 70, that the cotton plant was grown in Upper Egypt towards Arabia. Arrian, who wrote in the second century, (Arrian Indi, c. 16, p. 582), stated that cotton cloths were among the articles received from India by the Romans of his time, though at this date the importation must have been of a desultory character, as no mention is made of the different kinds, by any writers of the period, or in the Roman law *de Publicanis et vectigalibus*, which detailed all the different kinds of merchandize then imported; indeed, until *Justinian's Digest of the Laws*, in which, in a list of goods imported, is enumerated (A.D. 529) Indian cotton goods, we do not find notice taken of them by any writer, though other goods are repeatedly mentioned. In the *Circumnavigation of the Erythæan Sea* by Arrian, written in the second century, cotton goods are first distinctly mentioned as an article of trade, and particular mention is made of the import and export of several Indian towns, in their trade with the Arab Greeks. The Arab traders brought Indian cottons to Aduli, a port on the Red Sea—the ports beyond the Red Sea had an established trade with Patali (on the Indus), Ariakà, and Barygaza (the modern Baroché on the Nerbudda), and received from them, among other things, cotton goods. Baroché is said to have exported largely, the calicoes, muslins, and other goods both plain and figured with flowers, made in the provinces of which it was the port, and in the interior of the more remote provinces of India. Masalia, (the modern Masulipatam), was then, as it has ever been since, famous for

the manufacture of cotton piece goods. The muslins of Bengal were then, as in the present day, superior to all others, and received from the Greeks the name of *Gangitiki*, from being made on the borders of the Ganges. Surat was famous for its coloured chintzes and piece-goods, but the Baroche muslins were inferior to those of Bengal and Madras, as were the printed chintzes of Guzerat to those of the Coromandel Coast.

Thus, while we were in primeval darkness, India was in comparative light—while our ancestors in this northern clime were in a state of wild and undisguised nudity, the Indian had for thousands of years clad himself in the exquisite cotton manufactures, and not content with this, supplied the great European nations of the time, with his surplus productions. But how much has England now revolutionized the manufacturing world—the tide has now turned upon the Oriental. In the year 1815, for the first time, after the opening of the country to private trade, a few pounds of our British manufactured cotton yarn defiled the Eastern natives' skin, and since then such has been the force of circumstances, that their exports of cotton goods hence have dwindled away until they are now almost annihilated, while we are year by year supplying them with largely increasing quantities of both yarns and goods manufactured from the raw material they themselves produce: nevertheless a considerable export still takes place of Indian cotton piece-goods to the ports of the Red Sea, China, and the Eastern Archipelago. But the question now arises, will India become strictly a producing country, exporting all her produce to Great Britain to be manufactured, receiving in return cheaper and more serviceable manufactures, or will India be able to adopt the means by which we have so turned the tide, and in her turn manufacture for herself the immense quantity of cotton manufactures consumed by the native population? We may have occasion to show that the *latter* must ultimately be the case; but for the present we will look upon India as a source whence our demands for the raw material may be supplied.

Apart from the reasons which point to the inadequacy of the rate of production in America to meet the growing demand, there are also numerous others which render it of the utmost importance that the supply of cotton from India should be encouraged to the largest possible extent. Though we shall confine ourselves as far as practicable to the statistics elucidating the past and present export trade, the causes which have prevented its more rapid development become an important part of our subject. As a colony in which we have a deep interest, enjoying an abundance of labour, with almost every

diversity of soil and climate, and adapted to cotton cultivation, as is unmistakably proved in its present extent and antiquity, there is every incentive to probe the reason, and endeavour to point out the means by which so desirable an end may be attained.

The proportion which the quantity of East India cotton bears to the total imported into this country from all other sources, may be conveniently illustrated in annual averages of quinquennial periods, thus:—

	East India.		All other kinds.	
	lbs.		lbs.	
1800—4 ..	3,551,375 ..	or 6 per cent.	54,068,675 ..	or 94 per cent.
1805—9 ..	4,931,850 ..	or 7 ..	60,908,602 ..	or 93 ..
1810—4 ..	9,637,687 ..	or 11 ..	77,150,224 ..	or 89 ..
1815—9 ..	34,293,655 ..	or 26 ..	96,144,852 ..	or 74 ..
1820—4 ..	13,553,256 ..	or 9 ..	140,012,650 ..	or 91 ..
1825—9 ..	23,793,450 ..	or 10 ..	201,924,481 ..	or 90 ..
1830—4 ..	27,828,314 ..	or 9 ..	266,171,904 ..	or 91 ..
1835—9 ..	51,260,320 ..	or 12 ..	363,778,868 ..	or 88 ..
1840—4 ..	84,344,421 ..	or 14 ..	501,962,553 ..	or 86 ..
1845—9 ..	66,370,532 ..	or 11 ..	560,236,071 ..	or 89 ..
1850—4 ..	125,621,264 ..	or 16 ..	701,048,927 ..	or 84 ..
1855—8 ..	177,184,140 ..	or 18 ..	802,640,692 ..	or 82 ..
(4 years)				

clearly shewing the comparatively small supply of East India, as compared with the other kinds imported, of which the United States forms by far the larger part.

The first recorded import of East India cotton took place in 1783, and though there is an evident and considerable rate of increase up to the present time, it is still very unsatisfactory when compared with the increase shown in that from the United States. Up to the beginning of the present century, it was so fluctuating as to render it almost impossible to ascribe to it any general or rather specific ratio of increase; by taking for our basis however, the annual averages of decennial periods, we shall be able to arrive at a rate of progression and account intelligibly for the variations which are so frequent and apparently uncertain. Thus the quantities imported have been:—

	lbs.		lbs.
1789 to 1798 ..	487,230	1829 to 1838 ..	38,025,505
1799 .. 1808 ..	3,661,134	1839 .. 1848 ..	72,990,689
1809 .. 1818 ..	19,776,975	1849 .. 1858 ..	140,768,139
1819 .. 1828 ..	23,058,315		

And much as we may deplore the great discrepancy in the rate of

progress as compared with that in the case of the American cotton, it is pleasing to mark the steady increase in the supply, despite all obstacles ; the most novel and important feature however presented is the sudden check which arrested the onward progress in the period 1819 to 1828, the consequence of the immense reduction in price established in the interval ; and we cannot fail to observe the unpreparedness of the growers of India for this fall in price, as is evidenced by the rate of progress in the succeeding period having again increased even under a still further decline, though not at so rapid a pace as that which happily characterizes the two last decennial periods, arising partly from higher prices prevailing in Liverpool, and partly from better cultivation, combined with greater facilities of internal communication, and speedier correspondence with Europe. The variations in the rate of supply in the present day are chiefly caused by the fluctuations in prices in the Liverpool market ; stimulating doubtless to a certain extent the industry of the native grower in times of high prices and deficient supply, but mainly supplied from the quantities which otherwise would have been exported to China direct from India.

The proportions, the several divisions of our Indian empire have furnished of these imports of cotton in the last nine years, appear thus :

	Bombay.	Madras.	Bengal.	Ceylon.	Singapore.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1850	112,408,140	5,571,450	85,789	807,363	..	118,872,742
1851	112,373,721	6,460,782	1,175,940	2,616,519	14	122,626,976
1852	80,492,272	3,808,224	557,088	64,843	..	84,922,432
1853	159,069,494	12,718,114	7,660,242	1,817,642	582,668	181,848,160
1854	110,179,104	5,420,576	1,144,416	3,044,135	47,778	119,836,009
1855	137,089,232	6,310,528	86,912	1,692,544	..	145,179,216
1856	168,263,536	8,696,128	1,418,928	1,966,384	151,648	180,496,624
1857	228,521,328	17,245,424	2,534,560	2,036,832	..	250,338,144
1858	123,769,408	5,438,944	190,400	3,323,824	..	132,722,576

Our statistics of the Indian export trade do not extend back sufficiently far, to allow of any correct idea being formed of its earlier features. The earliest period at which we have any statistics bearing on the subject, is of the port of Calcutta from the years 1795-6, at which date almost the whole of the cotton exported from India came through that port. Even since that date a small quantity of the produce of India has gone direct to the United States, but except the novelty thus presented, the features are very incongruous and devoid

of interest. It is only since the year 1834-5 that the statistics at our command assume a complete form. The quantity exported by each of the three Presidencies since that date may be conveniently exhibited in annual averages of quinquennial periods thus :—

	Bombay.	Madras.	Bengal.	Total.
	lbs.	lbs.	lbs.	lbs.
1835-9	91,309,665	13,576,300	31,880,575	136,266,540
1840-4	141,802,690	18,992,400	13,976,820	174,771,910
1845-9	133,886,826	13,969,569	9,900,497	157,756,892
1850-4	179,838,889	18,770,256	22,663,188	221,272,333
1855-8 (average 4 years)	222,076,713	15,962,242	9,702,974	247,741,929

And we cannot fail to observe the important part the Bombay Presidency has hitherto played in furnishing even these supplies. In Bengal, there are evident signs of a decay in the cultivation, at all events for export, while Madras is yet quite unable to extend its sphere of production, as is amply evidenced by its sluggish response to an advance in prices. Even in the Bombay Presidency, the low-price years 1843-49 produced a great decline in the export trade; but this is not surprising, considering that in the United States, it was stated, the planters were at the time for the most part working their estates at a loss.

The distribution of this export has not of course been made entirely to Great Britain, for adopting the same system of averages, the statistics show it to have been, to—

	Great Britain.	China.	Other parts.	Total.
	lbs.	lbs.		lbs.
1835-9	51,161,059	85,105,481		136,266,540
1840-4	88,868,685	85,903,225		174,771,910
1845-9	70,757,425	85,427,227	4,572,240	157,756,892
1850-4	130,557,160	84,332,450	6,382,723	221,272,333
1855-8 (average 4 years)	185,229,082	42,973,429	19,539,413	247,741,929

The steadiness thus apparent in the rate of supply to China until the last period, and the then sudden falling off, is very remarkable. It will be at a glance detected, that though the supply to this country has of late considerably increased, the total export from India has not proportionately done so—in short, that as the demand for Europe increases, and raises the market price, that for China almost in an equal ratio declines, showing it to be subservient to, and contingent on, the British demand; and that in years of low prices, when the export from India to Europe is small, a corresponding increase takes place to the China market. By the figures adduced we further see, that while the increase in the total exports from India in the last twenty years has been only 82 per cent., in the exports to Great Britain it has been 262 per cent. The simple deduction therefore seems to be, that our increased importation of raw cotton from India, attracted by a high price ruling in the home markets, does not necessarily imply an equivalent larger growth in India itself, as part of that shown in the last period is made up by a proportionate decline in the quantity exported to China from Calcutta and Bombay, the Chinese apparently not being purchasers of the raw material at the high prices current in London and Liverpool.

While on the subject of the distribution of the exports from India, it will be remarked that there, as in all the cotton-exporting countries of the world, the quantity exported to continental Europe has amazingly increased in the last period 1854-58, which is before shown only under the exports to "other countries." In that period, the following were the quantities exported to continental Europe :—

		lbs.
1854-5	..	1,160,660
1855-6	..	2,235,916
1856-7	..	18,389,719
1857-8	..	33,846,464

Much controversy has arisen as to whether the increase apparent in the exports of raw cotton from India in the last twenty years, is really the result of an increased production. If we were to consider the wants of the natives of India to have remained stationary, the greatly increased exports of British cotton manufactures thence to India go far to make up for the increased exports of cotton hence. Looking at the Table furnished in Dr. Forbes Watson's excellent paper read before the Society of Arts in the last session, the weight of cotton exported from this country to the East Indies in manufactured goods, as compared with the weight of cotton exported from India, taken in annual averages of quinquennial periods, appears to have been :—

	Weight of Cotton in British Cotton Manufactures exported to India.	Weight of Raw Cotton exported from India.
	lbs.	lbs.
1840-4	49,837,791	174,771,910
1845-9	59,118,201	157,756,892
1850-4	87,789,808	221,272,333
1855-7 (average 3 years.)	101,993,544	272,395,875

But the basis upon which the weight of exported goods is here calculated, does not make any allowance for the difference in the class of goods now exported. The exports of cotton goods to the East Indies now run much more on fine goods, the coarser kinds, which in former years were exported thither, are now scarcely ever shipped, so that the increase shown in the weight is perhaps a little overdrawn; still making allowance for this, if we, on the other hand, deduct for the decline in the exports of Indian piece-goods, the increase in the entire weight of cotton exported from India is not large. There is, however, abundant proof that the wants of the people have not remained stationary, the immense increase in the demand for, and production of, all East Indian produce, cannot but have given to them the power of satisfying a wish for greater luxury, which with them displays itself in the decoration of the person. As instancing the demand for Indian produce of all kinds, the rate of increase has been, in the computed real value thereof imported into the United Kingdom in the last five years, as compared with the declared real value of British manufactures exported thither, thus:—

	East India produce imported; com- puted real Value.	British Manufac- tures exported to the East Indies.
	£	£
1854	12,973,613	10,025,969
1855	14,758,721	10,927,694
1856	19,373,524	11,807,659
1857	21,094,301	13,079,653
1858	17,407,185	13,283,852

And therefore we may infer, that there has been an increased internal demand for and consequent production of native manufactures, even though the quantity of the raw and manufactured cotton exported has not greatly increased. And there are good reasons which substantiate this view in another manner, thus : taking the effect of prices upon the Indian market, we shall see that the quantity available for export has increased, while the price has actually declined, thus in decennial averages :—

	Price per lb. of East India Cotton.	Cotton imported from East Indies. ¹
	d.	lbs.
1790	21	422,207
1800	14	6,629,822
1810	15½	27,788,700
1820	8½	20,294,400
1830	5	12,324,200
1840	4½	77,011,839
1850	5½	118,872,742
1857	5½	250,838,144

If, therefore, as is here shown, the imports from India have continued to increase, notwithstanding a comparatively reduced price, it is evident that the market value of the article in the Indian market is comparatively lower, either arising from an increased production, or an improved and cheapened mode of cultivation ; and applying a very commonplace rule, this fully proves that the people are permitted and will exercise a greater consumption under the cheapness, necessitating an increased production if a profitable one, and which, if it were not, would force a corresponding increase in price until it became so.

We may now proceed to notice more particularly the extent of cotton cultivation in India ; the districts in which this cultivation is carried on ; the causes which have prevented or retarded its extension ; and the means which have been pointed out as necessary to be employed in the accomplishment of this most important and national object., viz., an increased supply of Indian cotton, to do away with

¹ Though the imports into the United Kingdom are here adopted, the first quantity representing the entire exports from India (all the cotton then being exported to this country), the deductions drawn from them are quite correct.

the present suicidal dependence on one source for the maintenance of our position as a manufacturing nation.

The extent of cotton production in India is a question which has been much canvassed of late years, and various estimates have been made, all more or less differing according to the basis upon which they have been formed. Major General Briggs assumed that 375 millions of pounds weight are required annually by the natives for a portion of their dress weighing $2\frac{1}{2}$ lbs., and that for various domestic uses double this quantity is required, making the total consumption in native manufactures not less than 750 million pounds. Dr. Wight, on the other hand, sets down the consumption at 20 lbs. per capita, or 3000 million pounds. This estimate in the opinion of the late Dr. Forbes Royle is too high, but others have even considered it too small. It may be remarked, that such a quantity would require for its production nearly twelve times the surface, assumed as the extent of the cotton farms, in a report made to the Government at the time. Dr. Forbes Watson estimated the total quantity grown to be 2,432,395,875 lbs., distributed thus :—

		lbs.
For Internal Consumption	..	2,160,000,000
Exportation .. ..	..	272,395,875

being nearly equivalent to double the quantity grown in the United States. He (Dr. Watson) assumed *twelve pounds* of raw cotton to be employed by each one of the native population, or 180 millions of people ;¹ and taking Dr. Royle's average of the yield per acre to be 100 lbs., it follows necessarily that 24,300,000 acres are at present under cotton cultivation. Dr. Watson in working out his results, has adopted a mean from former estimates ; but even this makes the consumption of cotton per capita *sixty per cent.* greater in India than in the United Kingdom. At the date of the last census in 1851, the population of the United Kingdom was 27,724,849 persons, while in the same year the consumption of raw cotton was 205,086,622 lbs., or equal to $7\frac{1}{2}$ lbs. per capita, whereas the basis of Dr. Watson's estimate is $4\frac{1}{2}$ lbs. more for each individual consumer in India ; and it has been objected that the manufacture of so large a quantity under the rude modes of manipulation existing there, would require an immense proportion of the native inhabitants to be continually and exclusively employed in it. It must be acknowledged however, that the people of India differ essentially from Europeans, in that cotton is the material employed for their almost entire clothing, whereas in this country, the additional employment of wool, flax, and silk will pro-

¹ This includes the population in the native and so-called independent states.

bably swell the total quantity of textile substances consumed per head to *sixteen pounds*, the wool and cotton alone amounting to 12 lbs. In India, in addition also to being worked into every kind of fabric, from the coarsest canvas to the finest muslin, an immense quantity of cotton is employed for stuffing and like purposes, requiring little labour in its preparation. The native custom of burning the whole of the clothing and bedding of the dead is another frequent source of consumption unknown in this country, and which must be taken into account. I am disposed to think therefore, that Dr. Watson's estimate is about as fair an approximation as can be arrived at with our present means of judging.

If then it be correct that upwards of twenty-four millions of acres are at present under cotton cultivation in India, and which it may be remarked is nearly four times the area of that under cotton cultivation in the United States, it must be remembered that this immense area is scattered over, in a more or less degree, the whole of the great Peninsula, and yet hardly a single district throughout the whole extent of this magnificent territory is developed to one-third of its capabilities, or rendered sufficiently productive. The Bombay Presidency, containing 76,841,600 acres, and a population of 11,109,067, is calculated by Mr. Chapman to contain 43 million acres of land admirably adapted to the growth of cotton, greater by nearly one-tenth than the extent of such land in the whole of the United States as estimated by their Government; but if only one-fourth of this extent were cultivated, and each acre produced on an average 100 lbs. of clean cotton, (which by improvements it is reasonable to expect may be doubled,) we should have 1,075 million pounds, or equal to the quantity at present imported into the United Kingdom from all countries; and it is said this quantity might be sold to a profit in Liverpool at 3½d. per pound.

The chief cotton-growing district in the Bombay Presidency at the present day is Guzerat, which embraces under that name Surat, Broach, Kaira, Ahmedabad, and Kattywar, and in all of these there are millions of acres suited to cotton cultivation lying utterly waste and unproductive, nevertheless this district is said to yield 56 per cent. of the whole cotton crop of the country available for export. Its average exports of cotton to Bombay from 1834 to 1846 alone was 60 million pounds, but in 1840-41 they were better than 96 millions. The yield per acre of cotton in Guzerat is said to vary from 250 lbs. to 2000 lbs., one-third of this nearly being clean cotton, or from 80 lbs. to 600 lbs., the average yield to good cultivators being 150 lbs. per acre; and this fact furnishes irrefragable proof and illustration of the immense capability of the soil of India for cotton cultivation when properly

conducted. Experiments in Broach have demonstrated, that on moist (not damp) land, of which there is abundance, 600 lbs. of clean cotton can be produced per acre; in fact, the average yield of irrigated land there, is stated by Mr. Landon at from 350 lbs. to 400 lbs. per acre, and this while the entire produce in the United States ranges from 150 lbs. to 400 lbs. The collectorate of Kandeish, after 2306 square miles are deducted for roads, rivers, mountains, villages, and unarable lands, is said still to possess 6,058,640 acres every way suited to the growth of cotton; and this is only one of the sixteen collectorates in the Presidency, which is again only one-sixth of the vast territory even subject to British rule in India. Scinde, again, as attached to this Presidency, embraces a large tract of land adapted to the purpose, with all the advantages of a considerable system of internal navigation, and the means of cheap freightage and a thriving commerce; at present it labours under the disadvantages of a spare population, which will, however, doubtless eventually be attracted from other, in this respect, more favoured spots. In the Bombay Presidency it is stated 2,890,279 acres, or one-twenty-sixth of the entire area, is under cotton farm cultivation; and that, in 1854, 52,313 acres were reported as being planted with American cotton, and the extent of the latter may now be said to be three times as great. In old times the Presidency supplied Bengal with considerable quantities of the raw and manufactured material, and continues still to be by far the most enterprising in the matter of production; indeed, it is alone in this Presidency that the quantity available for export has shown any signs of increase.

The Madras Presidency, containing 84,537,600 acres, and a population of 22,301,697, has made little progress in the cultivation, either for home consumption or export. In the year 1854-5, it contained only 917,374 acres of land under cotton farm cultivation. At that date there were 2,320 acres under the American kind. Dr. Wight reported that the four southern provinces of Coimbatore, Salem, Madura, and Tinnevely, contained an area of 28,500 square miles, of which 2,480,000 acres were readily susceptible of cotton cultivation, and certainly capable, with a proper application of skill and capital, of yielding 100 lbs. per acre of clean cotton, or, in other words, an aggregate of 200 millions annually. The export cotton trade of Madras has hitherto been comparatively insignificant, though we may reasonably hope that ere long it will become a source of considerable supply.

The Bengal Presidency, containing 185,502,720 acres, and a population of 49,855,137, consumes in its native manufactures nearly the entire cotton crop, yet it possesses the excellent cotton growing

district of Berar, perhaps the best field in India, were the means of transport and other matters sufficiently progressed. The export trade in cotton has been very small; the largest quantity ever exported was in 1817-8, in which year from the port of Calcutta there were shipped 75,252,225 lbs., and, excepting one or two attempts at an increase in times of high prices, it has since that date continued to decline; by far the larger portion of that exported being to China. It is to be hoped, however, that the opening up of the Grand Canal in the Doab will prove to be attended with a considerable increase in the growth of cotton for the British market; the extent of land it is said to be capable of irrigating is 5,400,000 acres, which had become utterly waste for want of moisture; if one-third of this quantity only were under cotton cultivation, we might have an increased export from this source alone of 180 million pounds, that is: if the opinions are correct as to its adaptability to the cultivation. The great cotton field of Berar, however, presents perhaps the largest scope for action, were it but put on the same footing with the seaboard districts in regard to means of transport, there is little doubt but that a breadth of land would then become available to supply the full demands of Great Britain. There are however political considerations connected with the question of a railroad into the dominions of the Nizam which perhaps weigh against its expediency. The North-Western Provinces and the Punjab contain 105,022,720 acres, and a population of 40,025,975, showing it to be the most densely populated district of India; and here again there is reported to be thousands of miles of good land free to a great extent from jungle and timber and adapted to the cultivation of cotton; and yet this great area does little or nothing in an export trade, though the fact of their lying out of the reach of the monsoons, abounding with streams and rivers fed by the waters springing from the mountains of Cashmere and Kunawur, renders it certainly fitted to become a future source of supplies. There is further attached to this presidency the kingdom of Oude, containing 15,192,320 acres, and a population of 2,970,000, and the Eastern Settlements, including Pegu, estimated to contain 55,492,480 acres, but very thinly inhabited, the number being estimated at 1,639,493; making the total area of the presidency to be 361,210,240 acres, and the population 94,490,605.

Looking back through this meagre and scattered data, and comparing the facts with those presented on the subject of the United States, they appear very startling. India containing in its three Presidencies (exclusive of the native, or so called Independent States) 522,580,440 acres of land, and a population of 127,901,369, or about one person to every 4 acres. The southern and cotton growing states

of America (including Texas), containing about 530,000,000 acres, with a population of about 5,718,925, or one to every 90 acres. It is astonishing that while from the former the average export of cotton in the 4 years ending 1858, has been 247,741,929 lbs., that from the United States, during the same period, was 1,131,690,697 lbs., and this arising from the fact that the present means and system of cultivation does not admit of a successful competition in regard to price. The soil of India having been worked during thousands of years, while that of the United States is comparatively new, is a valid reason for a discrepancy existing, inasmuch as that it requires *twice as much* land in India (taken throughout) to produce 100 lbs. of clean cotton as in the United States. The cost of the land is about the same. But then the important item of labour is about 80 *per cent.* cheaper than in the United States. Again the States have their Mississippi and magnificent rivers; our Indus and Ganges avail us little in the matter of cotton supply, what the former may do remains to be demonstrated; one point is certainly proved, and that is, that with a yield of 100 lbs. per acre, under facilities of cheap transit, India can, even under the present system of cultivation, sell cotton in Liverpool at a price, which making allowance for inferiority of quality, is more advantageous to the manufacturer than other kinds for employment in about 70 per cent. of his business. But we must not therefore conclude that because throughout the length and breadth of the peninsula there is 2,400,000,000 lbs. of clean cotton now produced, that any large portion of it can therefore compete on those terms,—much of it is grown at a great distance from a shipping port, and though railroads may in a measure meet this objection, the yield obtainable though sufficient to maintain the production for consumption at the spot, would not be able to sustain itself in a competition in our markets. A large portion of it is grown in inaccessible spots for native use, and would not therefore enjoy those advantages, to fit it to compete with America, the future increase must rather come from its systematic cultivation in soils chosen as favourable to its growth, and places having ready means of transit to the selling markets.

The question of the relative abilities of the United States and India to compete for the supply of our great staple manufacture, is in the main contingent on the facilities of cheap labour and transit. For the immeasurable superiority of the soil of Texas, with its 300,000,000 acres, as compared with our Indian possessions, which do not seem to be capable of producing a greater average yield, under the present careless system of cultivation, than 100 lbs. of clean cotton per acre (although as before said, where care has been employed, and particularly by the application of judicious irrigation, greatly increased results have been ob-

tained), is only counterbalanced by the relative scarcity of labour in the former, and perhaps an almost equal rate of charges for transit as compared with that of our Indian supply, which is now for the most part obtained from the coasts and spots having facilities of easy and comparatively cheap communication, and as instancing the importance of this *transit* on the abilities of India to supply our wants, a table furnished by Mr. A. C. Brice to the India House, and quoted by Dr. Watson, will serve to show, that while in those parts contributing to the exports from Bombay having means of easy transit, the production for export has increased, other parts with long coast navigation and at a distance in the interior have even declined, —thus hope may exist from this fact alone, that with the opening up of the means of conveyance, a steady and considerable increase will take place.

The causes which have prevented or retarded the cultivation of cotton in India for the British and other markets, is a subject of great importance, and may be shortly touched upon here. The discussion or analysis of the several deterrent causes of social and industrial progress, either in detail or generally, point out incidentally the remedies and the means necessary to be employed for the regeneration of India, and the proper development of her vast capabilities as a cotton growing country. The extreme poverty of the native growers is acknowledged by all who have had the opportunity of observing them, and among the Government officials, from the Governor-General to the Revenue collector, it is an admitted fact; hence the secret of the "social despotism" exercised by the exorbitant money-lenders, who in reality grasp the fruits of the grower's industry. The want in India of purchasers on the spot, with improved modes of cultivation, and of cleaning and packing the cotton for the market is an equally admitted evil. The system of advances to cultivators of whatever description of produce is of general practice in India, and if it were conducted on proper principles would be of great advantage, it might be adopted by English capitalists to a large extent, and be productive of mutual advantage and profit. As it is, it is well known that the "middlemen" exact exorbitant interest for their advances, and when the cotton is received by them from the ryot, it is and always has been carelessly treated, adulterated, exposed to the weather and to dirt, to the great deterioration of its value. Hence much of its present inferiority in price to the American produce in the English market, and an extended demand for it only in case of a dearth of cotton from the United States. Under the present order of things the systematic adulteration of Indian cotton will

always exist ; the poverty of the native growers and the absence of English agents to make reasonable advances to them on the spot, compels them to borrow money at a ruinous rate of interest, and to sell their cotton much below its real value, the consequence is, they become indifferent as to its quality or condition, in fact as to anything pertaining to it except *mere quantity*. Ignorant and a prey to the native money lenders, improvement with them in the art of cultivation is entirely out of the question ; they are unassisted, incapable of progress, and bound as in fetters of iron, to the imperfect modes of culture pursued by themselves and their forefathers. Under more favourable circumstances however they would make greater advances in improvement, and by the aid of knowledge and implements and machines of European or American construction, speedily and successfully compete in favoured localities with their rivals on the banks of the Mississippi.

The want of a regular rotation of crops in many districts, and the almost universal mismanagement in the cultivation itself, or especially in the gathering of the produce and the cleaning and packing processes, tend to depreciate the cotton at least *fifteen per cent.* in value, and at the same time to render it (except at intervals) almost unmarketable in the Liverpool market, because the buyer there expects a dirty article in exchange for his money.

The absence of a regular or steady demand for the article, and the fact of the prices always fluctuating according to a sanguine or gloomy prospect of the coming crop in the Southern States of America, regardless of the condition of that in the East, operates as an effectual bar to the steady progression of shipments of Indian cotton to this market ; and this because it is well-known that American cotton will command the preference, and that the Indian varieties will only realize remunerative prices readily when the English manufacturers are threatened with a real or fancied scarcity in the supply from New Orleans. One great reason therefore of cotton not being extensively grown in India for export must be palpably evident. It is because the cultivator and the merchant are never sure of their produce realizing in the English market a sufficiently remunerative price—it becomes a speculation entirely, and they cannot afford to trade on contingencies ; especially the cultivator, because he is ever at the mercy of his insatiable creditor, the money lender of his village, and should he be disappointed in the price actually given, he would find it difficult to provide for himself and family the bare necessities with which he is compelled from his position to rest satisfied. I do not mean to insinuate, nor do I think, that fault lies in any quarter, for

it is the natural result of circumstances. The course now adopted by the Government of aiding the march of civilization and enlightenment by the means of intercommunication and transit, will do more than any other thing towards its eradication ; and until this is effected, the natives of India will never increase their growth of cotton for export to the extent of its capabilities.

As the Indian cultivator shall be freed from this unnatural incubus the production will increase—he will be able to cope with his American competitor, and his position will be then doubly improved, when the success or failure of his own crops shall impart the tone to the market, and influence our prices accordingly. That it is possible for them, with facilities of cheap transit, to compete with the Americans as cotton growers, cannot I think, admit of a reasonable doubt, but in order to do so they must have immunity from the tyranny of the “middlemen”; in short they must be so elevated and enlightened as to be able to triumph over or resist the machinations or impositions of the money lender ; and there is every probability that ere long European houses, one and all, will find it to their advantage to furnish to the grower all his requirements on a moderate charge, and furnish machines and instruct him in their use. Raw cotton can be purchased in most of the cotton districts at from $1\frac{1}{2}d.$ to $2d.$ per lb., which price leaves the ryot a fair rate of profit, considerably higher than he can ever expect from the grasping middleman. It is further found that, notwithstanding the enormous cost of carriage to the coast and of freightage, insurance, and charges to England, it can be sold in the Liverpool market at from $3\frac{1}{2}d.$ to $4d.$ per lb. Much of the present inferiority of the East India cotton arises from the systematic adulteration and carelessness of the picking and cleaning, all of which is susceptible of amelioration or entire removal, and the disparity therefore between the price of American and East India cotton will be greatly lessened. That the produce of India can be considerably improved, and brought at least to the standard of “American uplands” with an increased yield is a fact of great interest, and when we look at some of those samples of East Indian Egyptian seed cotton on the table, yielding even a greater quantity of produce per acre than the indigenous kind, and worth upwards of 60 *per cent.* more, we may reasonably conclude that there is every room for improvement, and for our Indian possessions becoming the first cotton growing country of the world.

It is universally acknowledged that means of cheap transit are essential to the development of India's industrial resources, and its onward march in the path of civilization and material improvement,

and that without such means the culture of cotton by the natives will always be on a limited scale for export, for we have it on the best official authority, that transport charges have more to do with the cotton movement in India, than perhaps any one single deterrent cause, and the reduction of even a halfpenny per pound or so would give such an impetus to it as would lead to a supply equal to a large portion of our wants as a manufacturing nation from this source alone. "The cost of conveyance" says Mr. Ashworth, in his admirable lecture before the Society of Arts, "of a bale of 400 to 500 lbs. of cotton a distance of a thousand miles on the Mississippi river has been as low as one dollar and ranges from that sum to one and a-half dollars, or 6s. 3d., and it is therefore in commodious and cheap conveyance more than in cost of growth that the present advantage of America over India as a cotton growing country is to be accounted for." Looking at the expenses of land and coast carriage in India, we find it interferes considerably with the extension of the export cotton trade; for instance the cotton producing districts south of the Nerbudda, and those of Oomrawuttty and Nagpore, in Berar situated remote from Mirzapore on the Ganges, lying between Benares and Allahabad, where if we take their average distance to the entrepôt in question, each pound of cotton costs in transit 2½d. per lb. This heavy charge arises from the fact that the cotton is exported on the backs of oxen, each carrying 160 lbs., at the extreme rate in fine weather of seven miles a day. But this is not all, it has then to be borne by water carriage little short of five hundred miles further, viz. to Calcutta, from which port if conveyed to England, any idea of profit is absolutely out of the question, unless a much higher range of prices should exist at Liverpool than is consistent with the rates usually current. Writing of these cotton districts and on this point General Briggs informs us "that in the absence of a defined and good road, a drove of several hundred head of cattle requires to be constantly watched and prevented from straying on the march, and this leads to the necessity of travelling by day in the hot weather, when the thermometer is seldom less than 100° and frequently 130° of Farenheit. These droves are seldom so few as a hundred and often exceed a thousand; every morning after daylight each has to be laden, and before the operation is over the sun is already high above the horizon. The cattle have then to proceed at the slow rate of two miles an hour, and seldom perform a journey of more than eight or nine miles a day. The horde generally halts one day in seven. If the caravan is overtaken by rain, the cotton becoming saturated with moisture, is so heavy as to prevent

its transport on the cattle, and the roads, if lying through the cotton-ground, are such that men even sink to the ankles at every step and cattle to their knees. It may easily be supposed that under such a calamity the merchant and the carrier are both ruined."

It is impossible to deny that the subject of internal communication in India, had not received that attention which its vast importance demanded, until, chiefly in consequence of the facts elucidated by Mr. Bright's Committee, the pressure of public opinion in this country had been brought to bear upon the Home Government of India. There is however good reason for believing that such matters now receive the anxious attention of the authorities, and it is gratifying to think that within probably three years nearly five thousand miles of railway will have been stretched through most important divisions of that vast and hitherto commercially inaccessible country. The means however by which further transit facilities shall be afforded involve a grave subject of consideration. Every one concurs in the assertion that the greatest civilizer and improver is the means of cheap and rapid transit, and latterly the Government has readily given its support to the projects set on foot with that view. It has sanctioned railroads, which involve an expenditure of capital of near £40,000,000, and on which an annual charge of nearly two millions sterling will accrue, and it is certain that a long period must elapse before taken as a whole these will pay the guaranteed rate of interest. No one would attempt to deny the prospective importance of the railroads now in progress, but, perhaps excepting some seaboard districts which might be advantageously opened up by such means, it is probable enough has been done for the present in this direction; and the general feeling now exists that sufficient pecuniary aid has been granted to this description of transit, and that attention ought to be directed to the formation of canals and to measures calculated to render as far as possible the different rivers navigable. The climate of India is such that the means of irrigation is as much a matter of importance as transit; it is equally the interest of the cultivator to produce good crops as to have the means of conveying them to a better market. Moreover many kinds of produce which can ill afford the cost of carriage by railway *could* be borne by this means without the uncertainty and deterioration which is entailed by the present bullock carriage. It is asserted, and with much force of argument, that canals, unlike railways, will, with the improvement of agricultural knowledge there, very soon defray their cost out of the income from irrigation, while the expense of transit by that means is immeasurably less. The labour too employed in the construction of canals is for the major part the mere hand labour which in India is

cheap and comparatively abundant, while in the case of railways the European civil engineers and mechanics all receive far higher wages than in this country, while they at the same time, from the greater temperature, are fitted to perform but half the work. Throughout the larger portion of India, if we except the Western Ghats, the nature of the country is admirably adapted to the formation of canals. The Government has extended a helping hand to at least one such enterprise, and will doubtless in like manner do so towards others where required. We understand that there is now the prospect of every effort being made to open up the Godavery, the great highway into the cotton field of Berar; and we have the opinion of Colonel Cotton that the navigation of the Godavery alone would do much to restore a large district in India to a state of agricultural prosperity, and to raise its inhabitants in the scale of social well-being; and the Parliamentary Committee on Indian Affairs put it on record that "it has been fully ascertained that cotton of such a quality as to compete on equal terms with that of America can be produced at a paying price in Bellary, Cuddapah, Coimbatore, and Tinnevely;" but it is also added that the cultivators had to encounter great difficulties and drawbacks from the want of easy communication between the interior of the country and the port of shipment.

So far then Government is affording evidence of its willingness to promote works calculated to assist in opening up the country, and in affording those means of irrigation so essential to the development of the resources of the country. Thoroughly to accomplish this much, will nevertheless depend on private enterprise directed on the spot. In addition however, to the transit and other difficulties now in course of removal, two causes especially preventive of efforts on the part of both the British and native capitalist to expend on schemes for such a purpose have been in operation, namely—the uncertain tenure of land, and the imperfect administration of justice. With regard to the latter, the majority of those examined on the point before the Colonization (India) Committee, were agreed as to the great room for improvement in this department; one involving the rights of property and other questions of great moment. With respect to land tenure, public opinion both in this country and in India has gradually arrived at the conclusion, that not only should lands now in the hands of Government be finally sold in fee simple, but that the redemption of the land tax in all parts of India cannot be too soon effected. For a number of years in a few remote parts of India, Government has granted land in what has been so far entitled to be called "fee simple," but attached to the transfer were certain privi-

leges which so far have tended to nullify the advantage. In December 1858 the Home Government sent orders to India, which we believe are now being acted upon, and which do so far facilitate the transfer of land in the manner wished for. Much however, in this way still remains to be done, and it is to be hoped that the subject will at an early date receive the attention of the authorities, both here and in India.

With reference to the legislative enactments affecting the Cotton Trade of India with this country, a few words may be ventured upon, as well as upon the question of the currency as having an important bearing on the general welfare of the country.

The course to be pursued by the Government of India in the matter of the Cotton Trade has not been clearly defined, and though the unquestioned policy of free and unfettered trade in this as in every other article may be said to meet the question, it does not in fact do so. The expenses of government in India must be defrayed, and legislation, therefore, in the matter resolves itself into a question of to what extent, if any, the article among others shall subscribe to the revenue. We, as a manufacturing, rather than as a producing nation in England, have come to recognize the benefit of exempting the raw material from taxation, on the ground that the employment of the people in the trade to which it indirectly ministers, more than compensates for the loss, and further that as an article almost of necessity, and certainly conducive to the comfort and happiness of the people, it does not form so fit a subject of taxation as articles of luxury, which in like manner can better bear such an imposition. It may be remarked, that no special legislation becomes necessary, and moreover that it is an undeniable advantage to the country to find a consumer for its surplus produce, the growth and export of which, therefore, should not be checked by the imposition of any duty. This is generally admitted I think, but India must not be viewed solely as a producing nation. India may and does produce twice the weight of cotton exported by the whole of the United States; the question arises—is it India's advantage to export the whole of this immense quantity, and thereby become a customer to Lancashire of an almost equivalent extent? It is, of course, the interest of this country that it should do so. Or, should India retain her raw cotton, and clothe her people unaided and independent: the whole difficulty is one of figures and cost. In the ordinary course of events the river will find its own bed adjusted by the law of supply and demand, but to predict the future course of the government becomes a matter of considerable difficulty, for in this is also involved the troublesome consideration of the occupation of the people.

It is a fact that cotton can be carried from the producing districts often 200 or 300 miles inland to the seaboard, thence to Bombay and to Lancashire, and there be spun and wove, and travels back in its manufactured state to the very places whence the raw material first came, and still enters into competition with, and is in fact displacing the twist, not to say the cloth, which is spun in the very cotton-field itself. This tends to show that Indian labour is at present unprofitably and disadvantageously employed in spinning and weaving, and by imposing a duty on raw cotton, or an import duty on British twist and cloths, we are giving a premium to the maintenance of an unwholesome condition of trade; but here the question arises, why then has not more been drawn out from the country? A number of circumstances some natural, some artificial, are the reasons, and these cannot be overcome but by time. First and foremost, the great difficulty of inefficient means of transit and communication, and the poverty and ignorance of the larger part of producers and consumers, who in selling the cotton obtain but a tithe of that we pay for it, and, in purchasing the English manufactured article, in a similar way become the sufferers by the craftiness of the middlemen or native merchants, until it is clear, the poor ryot finds it more to his advantage to retain it for his wants, and during the hot season, when little labour in agriculture is required, convert the raw material by hand into coarse and heavy manufactures; but the means of transit, which are undergoing great improvement and extension, will afford the surest guarantee of the removal of this unnatural incubus on the native and the country, and while enriching both, form a source of great advantage to our trade. Meantime it may be questioned, whether it is the proper policy to be pursued by the Government to levy a tax on imported British cotton manufactures, which tends to foster the native hand manufacture; so far from the labour not being required, it is on the contrary greatly needed, the cry has lately been, the want of labour in the cotton fields for picking and cleaning. The cotton districts are among the most thinly peopled of India, and when we remember that it requires 750 adults, working 10 hours, to free from seed one ton of cotton, we can comprehend how the diversion of part of this labour has effected an already deficient supply. It is chiefly in the cotton districts that cotton spinning and weaving maintain their position, and interfere with cotton picking and cleaning. It is better that native manufacture should die out, unless it can sustain itself without protection. Let Government do also all in its power to disenthral the poorer native from the vicious influence of the middlemen, and the people will devote themselves to such occupations as will be most to their own interests, which will I imagine at present be

in the proper production of the raw material Great Britain so much needs, and reaping from it a fair mede of profit, will, with the cheaper and better adapted cloths of Europe, be placed in a position to enjoy greater luxuries of life. India should on no account be governed for the English. I would deprecate the course now advocated, if it simply tended to help British shipping and Lancashire mills, but if the import duty on twist and calicoes imported into India is continued, or even raised to a very great extent, hand spinning and weaving must die out, and we merely prolong the struggle to make the cotton yield the grower in India less money, or to make it cost the spinner in Lancashire more. While a tax is thereby levied on the consumer of either native or British fabrics in India, which is paid to the native manufacturer to protect him in his unprofitable business. The case is different with mills conducted on English principles and with English machinery, if Government decides that it will be a national object to foster such, most of the objections to an import duty on twist and cloths vanish. I believe, however, the true policy of government is primarily to legislate so as to drain the raw cotton out of the country, and create a demand for our manufactured goods in lieu of those now manufactured in India. To acquire an increased interchange of products with other countries is the aim of every aspiring nation ; to sell as much of its produce, and receive in return foreign articles to please the taste or fancy of the people, is one of the greatest incentives of trade, but it must be admitted that if the ingredients of manufacturing success exist, India acquires more wealth by itself manufacturing either for its own wants or for export.

We have heretofore considered the native cotton manufacture of India only as that conducted under the old and rude hand processes ; but we must now regard the matter from another and distinct point of view. We will look at the advantages accruing to India from adopting our more improved processes for her own benefit, and consider its seeming practicability. We know that the quantity of the raw material employed in the Indian native manufacture, is more than double that imported into this country, and this under all the disadvantages of the present expensive and wasteful mode of cultivation and manufacture there ; how much the demand might expand were the processes economized more in accordance with that we employ, may be judged by the great development we have seen as having occurred in our own trade in the past century. That there is abundant room for economy is amply proved in the successful competition of British manufactures in all those parts of India into which they have gained access ; and this economy must in part come from the substitution of machine for hand labour. The cry of there being no other occupation

for the native population, is certain to be raised against the destruction of the native trade ; but its fallacy was never more palpably evident than in this particular case. Taking India as a whole, it is the consumer of its entire production ; what advantage then can it enjoy in spending one week in the manufacture of a piece of cloth which can be as well made in one day ? It is argued, that throughout the dry season, when vegetation is checked, there is no occupation for the people in agriculture, and that it is then they are employed in spinning and weaving for the wants of the coming active season ; if this applied in its full sense each family would work for itself, and British manufactures would probably never force their way against the hand wove fabrics so long as it existed ; and if, on the other hand, it is merely a class trade followed only by a limited number, it is clear that the number of consumers must pay so much more, which is an additional burden upon them for the advantage of the manufacturing few. These are, however, exploded objections, and it is unnecessary further to dwell upon them ; every one now acknowledges that India's advance must be attained by aiding, and if need be, forcing its forward progress by the economical employment of science and art, especially to material and useful purposes. Whether Great Britain or Bombay can supply some of India's wants cheaper than heretofore has yet to be decided ; but it is clearly the consumer's interest to buy from the cheapest market. Granted, labour is cheap there, (that it is not over abundant however, is proved by its being too dear to compete with machinery even at this great distance) ; but it follows, that if assisted by science and art, it may become as valuable and comparatively as scarce as with us. There is the soil, the climate, all the natural facilities of production ; knowledge is all that is required to render it advantageous to more fully employ it ; and if we should throw the native weaver out of that employment, we in doing so only lead him to a more profitable one, and advance his own condition.

The question mainly resolves itself into whether Lancashire shall manufacture the material to supply the place of the native fabrics, or India manufacture for itself on the same economical principles, instead of sending the raw material several thousands of miles for that purpose, to be returned charged with all the immense attendant expenses, which apparently might be saved ? In looking at the subject—the advantages to the capitalist, the people, and the country all command attention. Unless there is a clear benefit to be gained by the capitalist, it is fruitless for us to hope that the manufacture by machinery will ever be established in India, except that Government, looking at the advantages to the people and the country, should extend a helping, or rather protective, hand ; and this is always a

questioned, if not condemned, policy. Whether it will be advantageous to the capitalist in India, when all the difficulties shall have been cleared away, to admit of a fair competition, is likely to remain an open point until some further practical solution shall have been effected. The disadvantages under which Great Britain labours in competing with any properly organised Indian mills, in having to carry the material backwards and forwards, are so great as apparently to more than counterbalance the disadvantages under which India labours. There are, however, so many contingent circumstances which enter into the calculation, and the pros and cons are so numerous, and withal so prodigious, that the whole question seems to hinge on those very contingencies.

The *first cost of mills* will in India be double what it is with us, arising from the large freight and charges which would have to be incurred in the transport of the material, and greatly increased cost of European superintendence in erection, as in all the attendant circumstances.

Wear and tear of buildings and machinery in India, is stated certainly not to be less than 10 per cent., while in this country it is about 5 : thus—the machinery requires renewal every 15 years, buildings every 45 years ; say, as value of buildings are one fourth of that of machinery, every 20 years or 5 per cent.

Wages. The proportion of “skilled” to the “mere hand labour” is in this country not much more than 1 in 10 ; but it is estimated by those well acquainted with the subject that it would in India amount to 3 in 10.

Operatives in India would be paid at the rate of 2s. per week, while in England the extreme average would give 15s. per week ; but as in India the day's work effected is much less per man with other drawbacks the amount of work done is 15 to 20 per cent. less than in England, while in the rate of wages they have an advantage equal to 87 per cent.

Skilled labour, or that which would have to be supplied by Europeans, will be increased by 150 per cent.

Raw Material will cost the manufacturer in India less by all the transit, and home merchants' charges ; and Manchester, London, transit, and Bombay selling charges on British manufactures, which would in like manner be saved.

Let us then, from this data, endeavour to work out the relative cost of manufacturing the material employed in our trade in the year 1856, the date at which the last return was made by the Factory Inspectors ; and it will better answer our purpose to deal only with the operations of spinning and weaving. We may suppose, that out

of the entire manufacture, the value of which in that year was £57,000,000, £40,000,000 was the value of the produce of those two primary operations, made up as follows :—

	£
Labour	10,000,000
Cotton actually consumed, 856,700,000 lbs. ..	22,000,000
Wear and tear of machinery, valued by Mr. Ellison at £40,250,000, at 5 per cent.	2,012,500
Interest on capital employed, as estimated by Mr. E., £64,750,000 at 4 per cent.	2,590,000
Profit and incidental expenses	3,397,500
	<hr/>
	£40,000,000

This would in India stand thus :—

Labour, <i>skilled</i> , say 80 per cent., or £8,000,000, would be increased 150 per cent.	7,500,000
<i>Operatives</i> , 70 per cent., or £7,000,000, would do, say 17½ per cent. less work, say increased to £8,225,000, on which there would be a saving of 87 per cent.	1,069,250
	<hr/>
	8,569,250

Cotton is charged to us with 12 per cent. merchants' charges in Bombay, of which say 8 per cent. would be saved to Indian manufacturer; exchange 6 per cent.; and with freight, insurance, home merchant, and sale charges, and loss of weight, &c., equal to another 22 per cent., makes up a total of 36 per cent.; but as instead of using Indian cotton we use better qualities from other countries, upon which the charges are not near so severe, we may safely say 30 per cent. may be allowed for these on £22,000,000, less 30 per cent.; say on £15,400,000	17,380,000
Wear and tear of machinery and buildings, being on £80,500,000 at the increased rate of 10 per cent. ..	8,050,000
Interest on capital employed, being £105,000,000 at 7 per cent.	7,350,000
Profit and incidental expenses	6,795,000
	<hr/>
	48,144,250

From which deduct Manchester, London, transit, insurance, and Bombay charges, allowing for advantage in exchange, or 30 per cent. on £40,000,000, the value of our manufacture.. ..	12,000,000
	<hr/>
	36,144,250

And if we take from off this 10 per cent., which is charged in addition (as duty) on the British manufactures imported into India, or £40,000,000	4,000,000
	<hr/>
	£32,144,250

These figures would appear to show the startling fact, that India could manufacture by machinery at a cost 20 per cent. less than Great Britain can sell British manufactures in the Bombay market; and when we regard the results of Mr. Landon's efforts at Broach, and the good repute in which the projected companies are held in Bombay, as is shown by the shares of the "Spinning and Weaving Company," being quoted 58 per cent. premium (having paid a dividend equal to 16 per cent.); the "Oriental Weaving and Spinning Company" at 39 per cent.; the "Throstle Mill Company" at 5 per cent.; and the "East India Spinning and Weaving Company, Limited, at par; we might be disposed to condone any fostering spirit Government might display for the new branch of industry there. But these circumstances which we regard as showing in favour of India, are not of the great weight we might at first sight be disposed to think them. The present experimental manufacture, which we may take to be embraced in the before-mentioned mills, extend only to the manufacture of yarns of no higher number than No.'s 40 (or 40 hanks, of 850 yards each, to the pound), while in this country we spin up to 700's for useful purposes. This is in a great measure accounted for from the fact of the indigenous cotton which is used being so very inferior, for in Lancashire it is not spun into higher numbers than 16's. But supposing the exotic cotton to be grown of the finest quality, of which there seems every probability, would it then become possible to spin the finer counts to compete with the British yarn? For that purpose the machinery becomes much more complicated and expensive, and the immense charge for interest greatly accumulates against India. The manufacture of the coarser counts must first be fully established before the latter can be attempted; and this will take some time. That machinery can be successfully employed there in particular localities in the manufacture of low counts, cannot be doubted. It is merely a question of time and of first cost. One of the greatest drawbacks to the enterprise, is the high rate of interest paid for money there; but ere a very few years have rolled by, this must yield considerably to the necessities of the times. As confidence is imparted, the immense stores of wealth which must be locked up there, the ill-got gains of the despised middleman, all will come out for employment in the development of the resources of the country, the increase in the value of property will yield a capital which will more than equal demand. As the people learn to bring science to bear upon their pursuits their wealth must vastly increase, and *pari passu*, despite the demand, the present exorbitant rate will be lowered nearer to our standard. As this development is going forward too,

the demand for labour will increase, and so far from its being necessary to maintain an expensive and fruitless occupation for a part of the population, the application of machinery will be fully required to maintain the advantages of a cheap labouring class to aid and feed it.

Although we find that the Companies before named have erected or are erecting in Bombay altogether 60,000 spindles and 300 looms, and adding to these 18,000 spindles in the Broach Mills and 30,000 in the Fort Glo'ster Mills in Calcutta, we have a total number of 108,000 spindles and 300 looms, which evidences some considerable enterprise in the matter. I still believe, however, that the policy of the Government should be to drain out the raw produce from the country, and allow the native hand manufacture to expire. India is not yet prepared to invest to the full extent in cotton mills, and so long as English capital is employed, there is little advantage gained by the people of India from the change. The present tax will bring in little revenue, being collected on only about one-twentieth of the entire Indian consumption, while the other *ninety-five* per cent., or the native manufacture, is increased in cost to the native consumer to the same extent; doing certain harm to the consumer, and perhaps under present circumstances fostering more the *hand* than *machine* manufacture.

In the early part of the evening I alluded to the currency of India, and it forms a subject of such importance to the effectual development of its trade and commerce, that I cannot conclude without a few remarks on the subject, though it scarcely comes within the scope of our present object. During the last three years of which we have accounts, the import of bullion into the Three Presidencies has been upwards of 41 millions sterling, or equal to the entire value of imported merchandize, while the exports have not exceeded two millions, leaving to have been employed in the country 39 million pounds sterling during the period cited; of course some part has been employed in the manufacture of ornaments and jewellery, but the Indian Mint Returns show that an immense proportion was converted into coin. By the increase in the trade with the east in the last few years, there has been an immense drain of bullion to pay for the produce we have imported from that source. In 1856 and 1857 alone, nearly £30,000,000 sterling was exported from this country, though some portion of this was of course on Government account; and in the year just closed it reached £15,000,000. It is not the immense proportions of this drain that is most startling, but that it consists almost entirely of silver, and this is caused, or greatly increased, from the only legal tender being silver in our Indian Colonies. To illustrate the effects of this drain upon our reserves of silver, the price of the

article in our market which in 1850 ranged about 5s. per ounce, has, within the past year, reached the enormous sum of 5s. 2½d. per ounce; to this country, this is a matter of great importance. The yield of silver in the world has steadily increased from 6 millions in the commencement of the century up to £8,000,000 per annum at the present time, and this supply does not appear capable of extension: while that of gold, which ranged about 4 to 5 millions up to 1840, has increased to about £85,000,000 annually, at which it has stood since 1853. It is obvious, therefore, that should this condition of circumstances continue, with the extension of our trade with the east, there are difficulties in store which must ultimately seriously affect the position of our own coin; but hoping, as we must do, that the difficulty will be met by the Government of India as far as lays in their power, the rest cannot be provided against, and the law of supply and demand must work out the solution. The cumbersome and expensive form of silver, as the sole circulating medium and only legal tender in India, entails great expense and waste on trade conducted on such a basis; the leading transactions between 180 million people involves an immense use of the coin; the wear and tear, and the restricted employment which is necessitated by its bulky form, imposes on the Government and the trader alike a heavy tax, and cripples the capabilities of the country. There does not appear any reason why the trade of the country should not be relieved of this heavy encumbrance by the partial substitution of a more easy form of media, such as the issue of Government notes, or at all events gold coin, and the nation relieved of the immense cost of maintaining one so expensive as the present, while we on our part would be relieved of the dread of seeing our silver coin reach an unpleasant premium, and of the enormous gold discoveries of America and Australia forcing on our gold a rate of depreciation in value equally undesirable. As indicating the feeling in the matter; for several mails past, merchants have been shipping fine gold in bars of 12 oz., which being worth 84s. per ounce, cost about £50 sterling each. These are shipped to Bombay, then stamped after assay, when they pass for 500 rupees. The novelty may be the beginning of an important movement. If these 500-rupee gold bars are found so convenient, some considerable relief may be thus granted. There are unquestionably some reforms called for in this respect, the necessity for a gold coinage must force itself upon public opinion, and sooner or later be followed by the issue of some readily convertible form of paper or credit, for which there exists a great want, which, along with other financial arrangements, it is to be hoped the Government will not delay the consideration.

of, and that the adoption of some comprehensive scheme may be the result.

In conclusion, we have shown I think that India embodies all the constituent qualities necessary to enable her to become the first cotton producing country in the world. We have seen that means are being vigorously employed to assist her onward progress in this and other respects, and there is great hope that before long she will rival America both in the quality and quantity of produce in the English market. The cloud which has so long o'ershadowed the vast Asiatic Continent is quickly dissipating before the dawn of civilization, and in opening up the country, and developing its resources, our legislators will have followed the most certain road for securing its emancipation and forward march in the sure path of moral and material development.

A large and valuable collection of samples of Cottons, Muslins, Yarns, and Cloths were exhibited, furnished from the Industrial Museum at the India House, and by several private firms.

DISCUSSION.

Previously to inviting discussion, the President (Colonel Sykes, M.P.) called on Dr. Watson for some remarks on the admirable collection of samples then on the table.

Dr. Forbes Watson with reference to the cotton samples, 103 in number, remarked that 63 were East Indian, 20 of the native or indigenous, and 43 of the exotic or American kind, and that the remaining 40 represented so far the growth of every other part of the world,—he (Dr. Watson) was having a careful determination made of the relative value of the different samples, and of the comparative lengths and other qualities of their staples. He had hoped to have had the whole of the latter in time to have given the heads that evening, but had not succeeded,—some results of importance had however already been obtained. It was now admitted that with all its imperfections East India native cotton could be employed in our manufactures, to the extent of from 70 to 75 per cent., but these samples conclusively showed that India could furnish exotic cotton of a quality sufficiently fine for perhaps all our wants. The various cottons from the American seed, grown in India, were found in point of length of staple quite as good as that produced in its native soil, indeed in that important respect the New Orleans samples on the table were even exceeded by the majority of those procured from similar seed in Indian ground, and in regard to the Sea Island variety of cotton, he found that it also retained its long staple characteristic when grown in India.

With a view to receiving a valuation of these cottons, irrespective of preconceived notions of the superior manufacturing qualities of that of one country over another, and as far as possible to eliminate the influence of bias, he (Dr. Watson) had forwarded samples, with simply numbers attached, to the highest authorities on such points, and hoped before long to be in possession of the results. He would however call particular attention to some of the samples on the table, to one from Sea Island seed, grown within 30 miles of Calcutta, and valued by Mr. Bazley at 1s. 6d. per lb., and to others received from Mr. A. C. Brice, and grown in Dharwar from Egyptian seed, and valued at 9d. per lb., remarking at the same time that the staple of the latter, as far as length was concerned, considerably excelled that of the former, and

that although other physical qualities, as well as the adventitious matters present, would considerably militate against its value, still the difference in price seemed very great and showed the necessity for the adoption of a valuation standard which would have reference to the intrinsic qualities of the cotton fibre itself, irrespective of preventible or removable sources of deterioration.

With regard to the question of the gradual deterioration of exotic cotton grown in India, as resulting from the influence of causes beyond human control, such as climate, &c., Dr. Watson stated that his examination of the evidence brought forward on this important point, had led him to conclude that such an effect was not produced,—that the samples on the table tended to confirm this opinion, and that besides he had lately received a communication from Dr. Wight (the greatest living authority on such a subject) fully confirmatory of the same view. In conclusion he repeated his conviction that India was perfectly capable of producing every quality of cotton required by the manufacturers of this country.

Mr. Patrick Smollett, M.P., was not a member of the Asiatic Society, but if allowable, would say a few words on the subject of the very able and interesting Paper with which Mr. Mann had favoured them ; he had the previous week delivered a lecture in Manchester on the same subject, and he would state then as he had stated there, that cotton could be produced in India equal to the British demand ; it only required that impediments should be removed, and the greatest in his opinion was the present system of land tenure. He had served 30 years in Madras, and knew there was no possible way to obtain land by purchase under the present tenure ; it was the curse of the country, and until that was removed there could be no progress ; capital would never be invested in improvements until its removal ; he (Mr. Smollett) would gladly invest his capital in that channel were it done. In Bengal, Behar, and Orissa (valued at four millions per annum), Lord Cornwallis, many years since, introduced permanent tenure, and bestowed lands in perpetuity, and they now yielded nine and ten millions, the people thereby being the recipients of six millions profit. Madras originally produced £3,600,000, and yet after numerous confiscations and annexations that Presidency only produced £3,300,000. The revenues of Bombay had not increased, if they left out Scinde and other recent territorial acquisitions,—Dharwar and Candeish had not increased in value, but on the contrary these provinces had declined in prosperity under their rule. Until the proprietorship of land was wrested from Government neither social nor material improvements would progress, let this be done and the rest would

follow. In his (Mr. Smollett's) opinion middlemen were necessary, it was not the usurer who affected the earnings of the labourer, it was the native officers of Government who plundered him. In Northern Madras and Bombay there were no safe tenures; Col. Sykes would say the village cultivator was the true landlord of the soil, but he (Mr. Smollett) contended that Government was the landlord. They pretended to call the ryot the landlord, but the demand Government made upon him was a rack rent and not a land tax. Every village was a farm, the boundaries of which were as well known, and its condition and value as well defined, as were the estates of any country gentleman in Great Britain. All that it was necessary to do was to insist that the Government ownership should cease and be conveyed to private landlords, subject to a fair taxation to enable the Government to defray the expenses of the State. Free trade in land was alone required, with roads and cheap conveyance, and if this were conceded the owner of the land might be left to grow that commodity which best suited the soil and yielded the best return.

Mr. J. B. Smith, M.P., had listened with great interest to Mr. Mann's excellent lecture. He thought Mr. Mann had demonstrated beyond a doubt that India was capable of producing as much cotton as they required. The point to which they should direct attention was, the obstacles which prevented its more extended production, and the reasons why they received so little from a country capable of producing so much. The honourable member for Dumbarton (Mr. Smollett) was of opinion, that it was owing to the present system of land tenure which prevented the application of capital and skill to the cultivation of the soil, and he (Mr. Smith) agreed with him, that this was a very great obstacle. No Englishman could hold an acre of land in India in fee simple. He had lately seen a remarkable letter from Mr. Bourne on this subject. That gentleman, although supported by all the chambers of commerce in England, was about eleven years before he succeeded in his application to the East India Company for permission to navigate the Indus by means of steam-trains. This arrangement being at length completed, it became necessary to erect machine shops at a great expense in India: would it be believed, that the Government refused to sell to Mr. Bourne a piece of waste land, "a mere desert," whereon to erect those buildings and houses for his workpeople? Could it be expected that India would progress under such a system as this, which, instead of encouraging the settlement of Englishmen in India, drove them from the country? But there were other obstacles to the growth of cotton in India, and its successful competition with America. The average production of clean cotton

per acre in India was only 70 lbs., while in America it was 400 lbs. Mr. Mann had stated that cotton was brought 1000 miles down the Mississippi river at a cost of one-eighth of a penny per pound, but he also told them, that the cost of carriage of cotton from Berar to a port was 2½d. per lb., so that the cost of freight in America was about 6 per cent. on the value of the cotton, while in India it amounted to 125 per cent. The question became, could this cost of carriage be reduced? Could the Indian planter be placed on an equal footing with the American in the cost of carrying his cotton to a market? They had evidence before the India Colonization Committee that this could be effected. Captain Haig, who had surveyed the Godavery river, which runs 100 miles through the finest cotton district in India, stated that it might be made navigable for a distance of 500 miles at an expense of £300,000, and that then cotton could be brought down the river to Coringa, the finest port on the eastern coast, at an expense of one-eighth of a penny per pound. He (Mr. Smith) knew that his honourable friend (Col. Sykes) said it was impracticable to render the Godavery navigable; but he was happy to say, that Sir Charles Trevelyan, accompanied by a corps of scientific men, had been to examine the river with his own eyes, and in an able minute confirmed Capt. Haig's report, and pronounced it a work of the greatest value and importance, opening out the richest part of Central India. If cotton could be brought from Berar at ½d. per lb. instead of 2½d. per lb., the buyer would be able to afford a higher price to the grower than at present, and the growth of cotton would thereby be greatly encouraged in this district. But was it possible to increase the production of cotton per acre? Why could not India produce 400 lbs. per acre? Because the soil of India was dry, and that of America moist. But India had magnificent rivers, why were they allowed to run uselessly to the sea? In ancient times this water was applied to the irrigation of the land. In the province of Madras alone there were agricultural tanks and irrigation works, constructed centuries before an Englishman set foot in India, which, taking into account the difference in the value of money in India and in England, it is estimated, represented about the same value as the amount of capital invested in English railways. Why could no water be suitably applied to the growth of cotton? They had evidence that it was formerly grown by irrigation, and they knew by the evidence of experiments that it could be produced equal in quantity and quality to American. He (Mr. Smith) had samples of watered cotton grown from native seed equal to the best Orleans worth 8d. per lb. If, therefore, by means of irrigation, the grower could produce on the

same extent of land four or five times as much as at present, and of a quality worth 8d. instead of 5d. per lb., the cultivation of cotton would become so profitable as to encourage an enormous increase of growth.

Mr. J. T. Mackenzie said, that irrigation never existed, at all events to anything like the extent stated.

Mr. J. B. Smith.—The Public Works Commissioners reported that vast works did exist, and every book on India confirmed it. Sir Emmerson Tennant, in his work on Ceylon, described the largest work the world ever saw—a valley of about fourteen miles in extent embanked for a reservoir. It was the application of water to the soil that was the source of the extraordinary fertility of which they read in tropical countries. It was the source of wealth of ancient Egypt, Babylon, and Nineveh, where, since the destruction of their canals and watercourses, the remains of which were to be seen to that day, the soil which maintained their vast populations had become a sandy desert. India could only be improved by the application of skill and capital to its soil; every encouragement therefore ought to be given to tempt British enterprise to India as the best means of developing its mighty resources, and of improving the moral and material condition of its people. Let them have the land in perpetuity, as in the British colonies; give them good roads, means of cheap transit, safety for person and property, and they might yet hope to see British rule a blessing to India and to England.

Mr. J. T. Mackenzie had listened with pleasure to Mr. Mann's able paper, and quite concurred with his friend Mr. Smollett, that it was most essential to impress upon the Government of India the necessity of permitting perfect titles to land to be given, not only for cotton cultivation, but for any real development of India's resources. The advocates of the production of cotton in India for export however, frequently overlooked other difficulties which had recently arisen in the endeavours to make India an increased source of supply. He especially alluded to the increase in the value of labour, and the enormous rise in the value of other agricultural products, as compared with cotton. The real question on which an extended supply from India depended, was, would cotton growing pay the farmer as well as other crops? In Mr. Mann's Tables, the price of East Indian cotton at Liverpool for the last two years averaged 5½d. per lb., and his (Mr. Mann's) average of the yield was taken at 100 lbs. of picked cotton per acre, which he (Mr. Mackenzie) thought rather too much. But accepting this somewhat excessive estimate, it would make the value of the produce of an acre of cotton when landed at Liverpool,

£2 3s. 9d. ; of this amount the Indian farmer only received 30 per cent., or 12s. 11d. per acre, the balance amounting to 70 per cent., going in interest to the money lender, transit to seaport, freight, insurance, shipping, and selling commission and charges. Within the last seven or eight years oil seeds had risen in value 300 per cent. ; rice and wheat, the staple articles of food, had risen 200 per cent. The present value at the place of production of an acre of oil seeds in India, would be about £3, of wheat and rice £2 10s., against the 13s. per acre of cotton, and they required much less labour for their cultivation. Under these circumstances he was apprehensive that the exports of cotton from India would decrease, unless there was a great rise in its market price at Liverpool, or unless by means of irrigation, the production could be increased to something like the American yield of 300 or 400 lbs. per acre.

Mr. Smollett. But at this price, supply from India is largely increasing.

Mr. Mackenzie. For the last two years the exports have not increased, as the increase of exports made to the United Kingdom was more than counterbalanced by the falling off to China.

The President, previous to proposing a vote of thanks to Mr. Mann, which would no doubt be unanimously accorded, would address a few words to the Society. On the table before them were arranged some one hundred specimens of cotton produced in various parts of the world, and some of those grown in India were valued by Mr. Bazley, M.P. for Manchester, at 1s. 6d. per lb. ; there could be no doubt therefore of the capabilities of India to produce high priced cotton, the proofs were before them. How was it then that the quantities desired in Lancashire did not arrive ? There were various causes, one of which was the uncertainty of price. If the price ranged high in the English market, very large quantities of Indian cotton found their way to it, as was manifest by a glance at the diagram of importations drawn by the late Dr. Forbes Royle, and which he (the President) held in his hand. In the year 1806, only 10,000 bales were imported of East India cotton, but in 1818 there were 240,000 bales, which in 1830 fell to 30,000 bales, but rose in 1841 to 270,000 bales. With such enormous fluctuations, and the consequent uncertainty of sale, the Indian producer was deterred from systematic cultivation, a steady demand would insure a steady supply, and that steady supply therefore rested with the cotton merchants and spinners in England. They had hitherto called upon the government of India to stimulate the growth of cotton ; but the government of India had no more right to dictate to the cultivator what he should grow to supply a cotton dearth in

Lancashire, than the government of England would have had to compel English landlords to grow potatoes on their estates when there was a potato famine in Ireland. Mr. J. B. Smith's panacea to insure cotton growth was by works of irrigation ; now it had never been the practice of the natives to irrigate cotton lands. Mr. Smollett's panacea was giving the people a fee simple in the soil. But he (the President) would suggest, without reference either to fee simple or irrigation, that those who wanted a steady supply of cotton had only to tread in the steps of the friendless European adventurers, who had established the growth and steady supply of indigo, the exportation of which a few years ago was scarcely known in India ; these parties, without becoming land owners, had rented lands from zemindars or other proprietors, and with borrowed money engaged in indigo cultivation, and set up indigo factories, some of them of prodigious extent and value. Upon the indigo estate of Mulnath, formerly in the possession of Mr. Andrews, and now in the occupation of the Bengal Indigo Company, there were thirteen factories, and the population upon the whole estate was about 209,000 souls. Sugar, oil seeds, and silk, were now being produced by similar agencies, and what had already been done and was then doing in those articles, could be done for the production of cotton. Let the Manchester manufacturers, instead of calling upon Jupiter to aid them, put their own shoulders to the wheel, and their cotton waggon would come to them regularly, with any desired load. He (the president) had for twenty-five years promulgated those opinions, both orally and in print, and was glad to find that a Cotton Supply Association had been formed in Lancashire, and doubted not, with steadiness of purpose, they would obtain from India any amount of cotton, and of any quality they might desire.

A vote of thanks was then passed to Mr. Mann.

TABLE No. 1, showing the Quantity of RAW COTTON Imported into the United Kingdom since 1783, distinguishing the Imports from India and other places; and the Price per lb. of "United States Uplands," and "East India Surat," Cotton in the Liverpool market.

Years.	East Indies.	Other places.	Total Imports.	Price, U.S. uplands.	Price, E.I. Surats.
	lbs.	lbs.	lbs.	d. per lb.	d. per lb.
1783 ..	114,183	9,621,530	9,735,663	..	..
1784 ..	11,440	11,470,648	11,482,068	..	..
1785 ..	99,455	18,300,929	18,400,384	..	..
1786 ..	..	19,475,020	19,475,020	..	..
1787 ..	..	23,250,268	23,250,268	..	..
1788 ..	..	20,467,436	20,467,436	..	..
1789 ..	4,978	32,571,050	32,576,028	..	..
1790 ..	422,207	31,025,898	31,447,605	..	9
1791 ..	3,351	28,708,324	28,708,675	..	11
1792 ..	..	34,907,497	34,907,497	..	13
1793 ..	729,684	18,311,295	19,040,929	17	13
1794 ..	239,245	24,119,322	24,358,567	15	10
1795 ..	197,412	26,209,928	26,401,340	21	17
1796 ..	609,850	31,516,507	32,126,357	21	17
1797 ..	912,844	22,441,527	23,354,371	24	16
1798 ..	1,752,784	30,127,857	31,880,641	33	23
1799 ..	6,712,622	36,666,656	43,379,278	38	19
1800 ..	6,629,822	49,880,910	56,010,732	26	14
1801 ..	4,098,256	51,966,049	56,064,305	27½	16
1802 ..	2,679,483	57,666,117	60,345,600	26	14
1803 ..	3,182,960	50,629,324	53,812,284	12½	11½
1804 ..	1,166,355	60,700,974	61,867,329	14	11½
1805 ..	694,050	58,988,356	59,682,406	16½	14½
1806 ..	2,725,450	55,450,833	58,176,283	18	14½
1807 ..	3,993,150	70,932,156	74,925,306	17½	13
1808 ..	4,729,200	38,876,782	43,605,982 ¹	25½	19½
1809 ..	12,517,400	80,294,882	92,812,282	24	18½
1810 ..	27,783,700	104,705,235	132,488,935	18½	15½
1811 ..	5,126,100	86,450,435	91,576,535	14	11½
1812 ..	915,950	62,103,966	63,025,936 ¹	18	14
1813 ..	Records destroyed by fire.			25½	17½
1814 ..	4,725,000	55,335,289	60,060,289 ²	30	21½
1815 ..	7,175,243	93,583,903	100,709,146	21½	17½
1816 ..	6,972,790	88,308,175	95,280,965	18½	15½
1817 ..	31,007,570	95,296,119	126,303,689	20½	17

¹ The year 1808 was that in which an embargo was laid by America on foreign trade

² 1812-14 were those of the American War.

Table No. 1—continued.

Years.	East Indies.	Other places.	Total Imports.	Price, U.S. uplands.	Price, E.I. Surats.
	lbs.	lbs.	lbs.	d. per lb.	d. per lb.
1818 ..	67,456,411	111,289,166	178,745,577	20	15½
1819 ..	58,856,261	92,296,893	151,153,154	13½	9½
1820 ..	23,125,825	128,546,830	151,672,655	11½	8½
1821 ..	8,827,107	123,709,513	132,536,620	9½	9½
1822 ..	4,554,225	138,283,403	142,837,628	8½	6½
1823 ..	13,487,250	177,915,253	191,402,503	8½	6½
1824 ..	16,420,005	132,960,117	149,380,122	8½	6½
1825 ..	20,005,872	207,999,419	228,005,291	11½	6½
1826 ..	20,985,135	156,622,266	177,607,401	6½	5½
1827 ..	20,930,542	251,518,367	272,448,909	6½	5½
1828 ..	32,187,901	195,572,741	227,760,642	6½	4½
1829 ..	24,857,800	197,909,611	222,767,411	5½	4
1830 ..	12,481,761	251,479,691	263,961,452	6½	5
1831 ..	25,805,153	262,869,700	288,674,853	6	4½
1832 ..	35,178,625	251,653,900	286,832,525	6½	5
1833 ..	32,706,453	270,950,384	303,656,837	8½	6½
1834 ..	32,906,752	293,968,673	326,875,425	8½	6½
1835 ..	41,190,501	322,512,762	363,702,963	10½	7½
1836 ..	75,618,314	331,340,713	406,959,057	9½	6½
1837 ..	51,075,562	356,211,221	407,286,783	7	4½
1838 ..	40,217,613	467,632,964	507,850,577	7	5
1839 ..	46,994,253	342,402,306	389,396,559	7½	5½
1840 ..	76,148,296	516,339,714	592,488,010	6	4½
1841 ..	97,008,199	390,984,156	487,992,355	6½	4½
1842 ..	88,365,250	443,384,836	531,750,086	5½	4
1843 ..	65,658,696	607,534,420	673,193,116	4½	3½
1844 ..	88,638,824	557,472,480	646,111,304	4½	3½
1845 ..	58,255,306	663,724,647	721,979,953	4½	3
1846 ..	34,033,721	433,822,553	467,856,274	4½	3½
1847 ..	83,542,864	391,164,751	474,707,615	6½	4½
1848 ..	83,773,078	629,247,083	713,020,161	4½	3½
1849 ..	70,162,364	685,306,648	755,469,012	5½	3½
1850 ..	118,065,379	545,511,482	663,576,861	7½	5½
1851 ..	120,010,443	637,369,806	757,379,749	5½	4
1852 ..	84,857,584	844,924,864	929,782,448	5½	3½
1853 ..	179,447,850	715,830,899	895,278,749	5½	3½
1854 ..	116,744,096	770,589,053	887,333,149	5½	3½
1855 ..	143,486,672	743,265,280	891,751,952	5½	3½
1856 ..	178,378,592	845,507,712	1,023,886,304	6	4½
1857 ..	248,301,312	721,017,584	969,318,896	7½	5½
1858 ..	129,398,752	904,943,424	1,034,342,176	6½	4½

TABLE No. 2, showing the Quantity of Raw Cotton exported from each of the three Presidencies of India, and its Destination; the Number of Pieces of Native Cotton Piece Goods, and the Weight of Cotton in same, exported from India; the Weight of Raw Cotton in, and Value of, British Cotton Manufactures exported to India; and of Raw Cotton and Cotton Piece Goods imported into the United Kingdom from India.

Year.	Exports of Raw Cotton from			Export of Raw Cotton from all India to					Native Piece Goods.		Weight of Raw Cotton in Manufacture exported to India.	Value.		Year.
	Bombay.	Madras.	Bengal.	Great Britain.	China.	All parts.		Pieces.	lbs.	lbs.		Cotton Manufactured in India.	Raw Cotton and Cotton Goods Imported from India.	
						Other parts.	All parts.							
1840	131,563,487	12,839,000	15,079,874	86,576,022	50,433,490	23,173,199	169,193,311	3,176,517	8,268,944	43,316,920	3,878,186	...	...	1840
1841	161,016,568	23,394,500	9,944,811	118,544,711	62,098,629	13,612,539	194,955,879	2,904,441	7,551,646	40,497,377	3,427,612	...	...	1841
1842	161,779,330	23,943,600	14,183,150	79,637,646	108,294,460	8,988,574	189,910,980	2,875,190	6,955,494	41,308,385	3,060,472	...	...	1842
1843	171,443,888	14,510,000	16,547,940	93,601,466	80,197,721	28,903,581	202,501,768	2,692,092	6,999,439	57,277,116	3,997,414	...	...	1843
1844	131,933,997	26,074,500	16,578,890	58,130,926	101,100,422	6,946,669	164,477,317	2,437,336	6,336,813	66,969,168	4,793,193	...	...	1844
1845	108,290,816	10,393,000	7,708,734	43,177,397	77,749,681	5,350,572	136,377,560	2,501,013	6,502,633	59,910,924	4,310,483	...	...	1845
1846	146,833,517	12,736,500	9,610,814	91,074,244	74,970,163	3,036,424	169,060,831	2,929,578	7,616,908	67,636,630	4,341,886	...	...	1846
1847	133,062,713	9,463,078	12,771,506	94,201,740	62,196,060	3,919,496	160,317,395	2,451,513	6,373,933	43,704,155	3,178,535	...	...	1847
1848	154,403,090	11,290,765	2,987,611	67,203,519	96,119,905	5,303,043	168,631,466	2,071,753	5,366,555	52,749,440	3,037,871	...	...	1848
1849	160,764,963	13,064,980	1,845,277	110,690,367	53,445,222	2,829,641	165,665,320	2,327,260	5,790,876	71,990,555	3,977,805	...	...	1849
1850	183,903,997	19,438,580	23,131,166	141,446,798	77,050,629	7,979,356	236,478,683	1,912,953	4,973,677	73,653,862	4,708,813	...	...	1850
1851	196,413,160	17,331,519	40,769,152	81,104,293	160,717,651	11,780,967	253,553,831	2,246,079	5,839,905	85,137,110	5,046,391	...	...	1851
1852	197,664,768	31,769,247	33,484,139	131,360,994	75,871,742	5,875,438	263,906,174	2,067,120	6,934,612	81,637,963	4,707,130	...	...	1852
1853	171,458,641	12,207,016	14,096,308	133,183,429	55,777,008	3,801,328	197,761,765	2,147,106	5,593,475	83,657,384	4,078,668	...	...	1853
1854	163,232,447	13,926,513	7,631,232	119,513,537	45,693,923	3,872,732	173,780,199	2,285,841	5,943,186	114,960,198	6,500,236	1,793,431	...	1854
1855	217,016,915	7,149,564	13,013,470	170,771,510	56,691,112	9,717,327	237,179,949	2,197,707	5,714,038	107,066,056	5,812,974	2,327,528	...	1855
1856	278,873,346	23,563,346	17,226,332	253,410,036	48,794,661	17,458,927	319,633,624	2,464,639	6,408,035	102,445,253	5,587,445	3,597,752	...	1856
1857	239,194,143	20,319,546	9,403,564	197,331,247	20,534,119	43,608,686	260,354,052	3,316,075	6,021,795	96,469,323	6,083,266	5,519,669	...	1857

NOTE.—The Indian official year ends 30th April; thus the Indian statistics given above are for the years ending 30th April, or 1857 means in that case the year ending 30th April proximate, or 30th April, 1858.



INDEX.

	Page		Page
APOLLONIUS of Tyana, Indian Travels of	70	Indian Embassy to Augustus, on the	309
Arabic Quadrant, Description of an	322	Inscriptions found in El-Harrah, East of the Hauran	286
Augustus, on the Indian Embassy to	309	Inscription in the Neu-Chih language	331
Bosanquet, J. W., Esq., on the Chronology of the Medes	39	Julien, M. St., Review of his translation of Hiouen Tsaang's Travels.. .. .	106
Buddhist Relics discovered at Rangoon	298	Kondhs, Human sacrifices among the 19, 31, 36	
Chronology of the Medes	39	Latham, Dr. R. G., on the date and personality of Priyadarai .	273
Coins of the Kings of Ghazni	138	Mann, J. A., Esq., on the Cotton Trade of India	346
Cotton Trade of India, on the	346	Medes, Chronology of the	39
Differential Calculus, on the supposed discovery of the principle of, by an Indian Astronomer	221	Morley, W. H., Esq., on an Arabic Quadrant	322
Fausbøll, Mr., Translation of a Pali Buddhist inscription on a gold band found at Rangoon, by Forbes, A. K., Esq., Notes on the Ruins of Wallabhipura, by	303	Neu-Chih Language, Inscription in the	331
Fowle, E., Esq., Translation of a Burmese version of the Niti Kyan, a code of ethics, in Pali, by	267	Niti-Kyan, Translation of a Burmese version of the, from the Pali	252
Frye, Lieut. J. P., on the Uriyas and Kondhs of Orissa	252	Orissa, Uriyas and Kondhs of .	1
Ghazni, on the Coins of the Kings of	138	Pali Inscription from Rangoon, Translation of a	303
Golden Relics discovered at Rangoon	298	Philostratus, on his account of the Indian travels of Apollonius	70
Graham, C. C. Esq., on inscriptions found in the region of El-Harrah	286	Priault, O. de B., Esq., on the Indian travels of Apollonius of Tyana	70
Hindu widows, on the authority of the Vedas for the burning of Hiouen Tsaang's Travels, Review of	209	Indian Embassy to Augustus .	309
	106	Priyadarai, on the Date and Personality of	273
		Quadrant, Arabic Description of	322

	Page		Page
Radhakanta Deva, on the Vedaic authority for the Burning of Hindu widows.	209	Thomas, E., Esq., on the Coins of the Kings of Ghazni ..	138
Rangoon, Buddhist golden relics discovered at	299	Traits of Indian character ..	223
St. Martin, M. V. de, Notice of his "Mémoire Analytique" of Hiouen Tssang's Travels ..	106	Uriyas and Kondhs of Orissa ..	1
Spottiswoode, W., Esq., on the supposed discovery of the principle of the Differential Calculus by an Indian Astronomer ..	221	Wallabhipura, Notes on the Ruins of	267
Sykes, Col. W. H., M.P. Traits of Indian character, by ..	223	Wilson, Professor H. H., on the Travels of Hiouen Tssang ..	106
Note on		on the	
Buddhist golden relics discovered at Rangoon	299	Vedaic authority for the burning of Hindu widows. . . .	209
		Wylie, A., Esq., on an ancient Inscription in the Neu-Chih language	331

JOURNAL

OF

THE ROYAL ASIATIC SOCIETY.

ART. I.—*On the Birs Nimrud, or the Great Temple, &c.*

****** The following Paper on the Birs Nimrud, by Sir H. C. RAWLINSON, is intended to form part of a Separate Volume devoted exclusively to subjects connected with the Discoveries in Assyria and Babylonia; but as some considerable time must elapse before the volume can be completed, owing to the absence of SIR HENRY on his mission to Persia, the Council has thought it expedient to stitch up the Paper with the present number of the Journal.

... of the many interesting questions connected with this remarkable ruin. Crossing the river at the village of *Anana*, a ride of three hours and a quarter brought our small party, which consisted of Dr. Hyslop, the Rev. Mr. Leacroft, and myself, to the spot in question. We found our tents already pitched at the camp, or village, which our labourers had formed a short distance to the north of the mound, but without alighting we proceeded on at once to inspect the excavations. That day was consumed in making a careful inspection of the various works in progress, and in endeavouring to realize and restore a general plan of the original building from a comparison of the various sections of exterior wall, and interior strata of brickwork, which had been laid bare by the vertical and horizontal trenches now seaming the mound.

Having satisfied myself from this examination that at several

VOL. XVII. B

points the outer walls of the primitive edifice had been reached, and that the line of one face (the south-eastern) of the third stage was completely uncovered, so as to leave the angles exposed, I proceeded on the next morning with a couple of gangs of workmen to turn to account the experience obtained from the excavations of Kileh-Shergat and Mugheir, in searching for commemorative cylinders.¹ On reaching the ruins I placed a gang at work upon each of the exposed angles of the third stage, directing them to remove the bricks forming the corner, carefully, one after the other, and when they had reached a certain level to pause until I came to inspect the further demolition of the wall. In the meantime I proceeded with flag staffs, compass, and measuring tape, to do what I could in taking sections and elevations. After half an hour I was summoned to the southern corner where the workmen had reached the tenth layer of brick above the plinth at the base, which was the limit I had marked out for their preliminary work. The bricks had been easily displaced, being laid in a mere bed of red earth of no tenacity whatever. The workmen eyed my proceedings with some curiosity, but as they had been already digging for above two months at various points of the mound without finding any thing, and as the demolition of a solid wall seemed to the last degree unpromising, and had at its commencement yielded no results, they were evidently dispirited and incredulous.

On reaching the spot I was first occupied for a few minutes in adjusting a prismatic compass on the lowest brick now remaining of the original angle, which fortunately projected a little, so as to afford a good point for obtaining the exact magnetic bearing of the two sides, and I then ordered the work to be resumed. No sooner had the next layer of bricks been removed than the workmen called out there was a *Khazeneh*, or "treasure hole;" that is, in the corner at the distance of two bricks from the exterior surface, there was a vacant space filled half up with loose reddish sand. "Clear away the sand," I said, "and bring out the cylinder;" and as I spoke the words, the Arab, groping with his hand among the débris in the hole, seized and held up in triumph a fine cylinder of baked clay, in as perfect a condition as when it was deposited in the artificial cavity above twenty-four centuries ago. The workmen were perfectly bewildered. They could be heard whispering to each other that it was *sîhr*, or "magic," while the grey-beard of the party significantly observed to his companion!

¹ From the ruins of a temple at the former place were obtained the cylinders of Tiglath Pileser I. (about B.C. 1120), which are now in the British Museum. The discovery of the cylinders of Nabonidus at Mugheir is described by Mr. Taylor in the last number of the *Journal*, vol. xv. part ii., p. 263 and 264.

that the *compass*, which, as I have mentioned, I had just before been using, and had accidentally placed immediately above the cylinder, was certainly "*a wonderful instrument.*"

I sat down for a few minutes on the ruins of the wall to run over the inscription on the cylinder, devouring its contents with that deep delight which antiquaries only know—such, I presume, as German scholars have sometimes felt when a Palimpsest yields up its treasures, and the historic doubts of ages are resolved in each succeeding line—and I then moved my station to the other angle of the stage, that is, to the eastern corner, in order to direct the search for a second cylinder. Here the discovery was not accomplished with the same certainty and celerity as in the first instance; the immediate angle of the wall was gradually demolished to the very base, and although I fully expected, as each layer of bricks was removed, that the cavity containing the cylinder would appear, I was doomed to disappointment. I then directed the bricks to be removed to a certain distance from the corner on each face, but the search was still unsuccessful; and I had just observed to my fellow-travellers that I feared the masons had served Nebuchadnezzar as the Russian architects were in the habit of serving Nicholas—that there had been foul play in carrying out His Majesty's orders—when a shout of joy arose from the workmen and another fine cylinder came forth from its hiding place in the wall.¹ As I knew the inscription would prove to be a mere duplicate of the other, I did not peruse it with the same absorbing interest, but still it was very satisfactory to have at least a double copy of the primitive autographic record.

I now moved the workmen to the two remaining angles of the stage; that is, to the northern and western corners, but with very little prospect of further success; for it was evident from a rough estimate of the level that the greater portion of the wall at these angles had been already broken away, and that, if any cylinders had been deposited within, they must thus have rolled down with the other débris to the foot of the mound. The workmen, however, were employed for two days in clearing away the wall at these points to its base, and subsequently in removing the bricks to a certain distance on each side of the corner; and although nothing resulted from the search, the rule was by no means impugned that, wherever the stage

¹ The news of this discovery of the cylinders at the Birs seems to have flown far and wide on the wings of fame, for since my return to Baghdad I have been besieged by applications to employ "the magic compass" in extracting treasures which are believed to be buried in the court yards or concealed in the walls of the houses; often in the very "boudoirs" of the ladies.

of an Assyrian or Babylonian temple can be laid bare, historical or commemorative cylinders will be found deposited in a cavity of the wall at the four corners, from one-third to one-half of the height of the stage, and at one or two feet from the outside surface. At the corners in question the angles were alone perfect near the base ; at the height where the cylinders should have been found the wall was already ruined to a distance of six feet on each side from the corners.

It now only remained for me to complete my measurements and, carrying off the cylinders as trophies, to return to the camp, which had been left standing at Babylon.

II.—ACCOUNT OF THE EXCAVATIONS UNDERTAKEN IN AUGUST, SEPTEMBER, AND OCTOBER, 1854.

The next point of interest will be to give a brief description of the works at *Birs-Nimrud*.

My original instructions to M. Tonietti had been to search the slope of the mound (not the fissures or ravines) narrowly for any trace of brickwork cropping through the soil ; when this was found, to ascertain the line in which the bricks were running ; then to follow the bricks outwards, at right angles of course to the line of the wall, until the exterior facing was reached ; from such a point to make an opening to the foot of the wall, and subsequently to run a trench along the whole line of wall until the angles were turned at the two corners, so as to expose the complete face of one of the stages of which I had no doubt the original building had been formed. I left it entirely to chance as to which of the four faces might be thus attacked ; but I suggested, in regard to height above the plain, that the centre of the mound offered the most favourable *locale* for excavation, inasmuch as the exterior surfaces of the upper stages might be reasonably supposed to have been destroyed, or at any rate to have suffered extensive abrasion from their exposed position, while the accumulation of *débris* towards the base would render it a work of immense labour to lay bare the face of the lower platforms.

M. Tonietti carried out these instructions with care and judgment. About half way up the mound he came upon a line of wall almost immediately, and, by tracing it outwards, he soon arrived at the perpendicular face. This face he opened to a depth of 26 feet, when he reached the platform at the base, and after a month's labour he suc-

ceeded in uncovering the wall from its southern to its eastern angle.¹ Having obtained this indication of level and extent, he had no difficulty, presuming the platform to be square, in discovering the northern and western angles at equidistant points, although, as several feet of débris were here accumulated on the surface, but for the guide afforded by measurement, there would have been no more reason for sinking shafts at such points than in any other quarter of this immense mound.

It was impossible to err as to the identity of the wall, discovered by digging at the northern and western angles of the mound, with that of which the south-eastern face had been already exposed, because, as I shall presently explain, it was composed of a peculiar material, not otherwise found in the ruin; but I did not think it worth while to verify this identity by excavating the three remaining sides, and thus connecting all the corners, as such an operation would have required a vast expenditure both of time and money. I thought it quite sufficient to have uncovered the south-eastern face and to have exposed all the corners, thus obtaining, either by measurement or calculation, the dimensions of the platform; and I accordingly directed that the next operation should be to run two trenches, from the summit of the mound to its foot, crossing the line of the exposed stage at its corners, and at an angle of 135 degrees, which, if the original structure had been formed of a series of platforms receding at equal distances on the four sides, would of course have exposed the angles of each successive stage, and have thus led to an immediate recognition of the design. Wherever a corner, or a single perpendicular wall was met with, I further directed the trench to be sunk to its base, so as to determine the height of the platform. Unfortunately as M. Tonietti was without instruments, these trenches were not run in the exact lines indicated. Even had they faced the south and east, which would have been nearly the supposed line of the corners, they would not have quite answered the desired purpose, for I have since ascertained that the stages were not erected with perfect equidistant regularity one above the other. From the example indeed of Mugheir, and the general contour of the ruin at the Birs-Nimrud I ought to have

¹ I must here observe that Rich and Porter have both been guilty of a most singular error in describing the sides of the Birs, as facing the four cardinal points. In reality it is the four corners, which with a slight error face those points, and the titles of Ker Porter's Plates (vol. ii., plates 69 and 70) must be thus altered throughout the series, his "western face" being S.W.; southern face, S.E.; eastern face N.E.; and northern face, N.W. The N.E. face is the front of the temple; the S.W. the back, and the other two are the sides,

inferred in the first instance that on the north-eastern face, which formed the grand entrance, the platforms receded considerably in excess, in order to give a more imposing appearance to the façade ; while on the south-western face which formed the back of the building, the gradines were crowded together, the difference of inclination which is thus observable on the two faces having been already remarked, and having even led to the supposition that the abruptly sloping face of the pile may have been originally perpendicular.¹

In M. Toniatti's operations the trenches were run too much to the left so that the eastern trench probably passed beyond the angle of the lower platform while the southern trench cut the wall at a distance of several yards inside the corner ; they were still, however, of great importance in laying bare the successive strata of which the pile was composed and in fact first led me to suspect a peculiarity of design which was completely verified by subsequent discoveries.

I will now explain the exact results which followed from the excavation of these vertical trenches, an experimental operation which in its nature was precisely similar to laying bare for inspection a fine geological section.

From the summit of the mound, upon which stands the solitary pile of brickwork, estimated by Porter and Rich at 35 or 37 feet in height, the trenches could make little or no impression on the mound for a space of about 6 feet in perpendicular descent.² It was evident to me from an examination of the strata of bricks and from observing the general character of the irregular surface of the platform, that all this portion of the building had been artificially vitrified at the time of its construction, and previous to the erection of the culminating stage, of which the remains exist in the solid pile at the summit. For this vitrification, which was caused no doubt by the action of fierce and continued heat, and which in fact converted the second highest stage of the temple into a mass of blue slag, a substance well known to the Babylonians, and often used in the construction of their cities,³ I shall presently show a good and sufficient reason. I do not

¹ See the proposed restoration in "Nineveh and Babylon," p. 497, and Mr. Layard's ingenious suggestion that the perpendicular wall may have served the purpose of a gigantic gnomon.

² It is very doubtful if Porter took any independent measurements of height ; his numbers throughout appear to be a mere servile copy of those given by Rich. Compare "Porter's Travels," vol. ii., p. 310, with "Babylon and Persepolis," pp. 75 and 167.

³ At *Sekheriyeh*, a Babylonian ruin, one hour south of *Bogheileh*, and near the confluence of the ancient Zab, or Nil Canal, with the Tigris (thus nearly answering to the position of the Apamea Mesenes of the Greeks), the only material which

hesitate, moreover, to say that it was owing to the accidental use of an imperishable material like slag so near the summit of the *Birs*, that we are indebted for the solitary preservation of this one building among the many hundreds of not inferior temples which once studded the surface of Babylonia. The original slag stage reached, I think, several feet above the present level of the platform, and the huge masses of vitrified matter, which have been so often described as strewn about the surface of the mound, and in some instances as having rolled down into the plain, have almost certainly split off from the lower portion of the pile now standing. The action of the fire probably did not reach—or at any rate it reached but imperfectly—the portion of the brickwork furthest removed from the exterior surface; and there are thus few marks of the vitrification to be traced on the base of the pile as it stands at present; but there is still, I think, a difference of quality to be recognized between the upper and lower divisions of the brickwork, the latter being the harder of the two. I suspect, indeed, that it was the imperfect vitrification of the whole mass which impaired its cohesive power, and led to the upper exterior angles of the platform which were thoroughly hardened and could not crumble, splitting off, under the action of the elements, from the brickwork of the centre which was not equally indurated; but when a broader base had been obtained, less susceptible of impression from the weather, the huge slag platform lay over the mound like the keystone of an arch, affording for the steeple-like fragment of the upper stages an immovable pedestal, and compressing and preserving the more perishable lower stages by which it was itself supported. All this will be rendered clearer in the sequel, but I could not resist giving a preliminary explanation of the vitrified masses at the summit of the *Birs*, as their nature and probable mode of formation have been generally misunderstood and have given rise to much extravagant hypothesis.¹

Between the vitrified brick-work, which formed the second highest seems to have been employed in the construction of the city is a dark blue slag. The mortar and mud cement have everywhere crumbled, but the masses of slag, now lying in heaps on the desert, exhibit no sign of decomposition. The same peculiarity is also observable in the ruins of *Roweish*, near the Hye. I should now suspect that both these cities had been originally consecrated to the planet Mercury.

¹ Thus Ker Porter supposes these vitrified masses “on the fire-blasted summit of the pile” to be fragments of the upper stage of the original tower of Babel, erected by Nimrod and destroyed by lightning from heaven.—*Travels*, vol. ii. p. 313.

stage of the Birs, and the red stage exposed belowed, the trenches passed through two distinct strata of materials for a space as near as I could calculate of about 30 vertical feet. The angles being entirely abraded in the line of the trenches, and generally, as I think, around the entire slope of the mound, it was impossible to obtain any measurement of a perpendicular wall, or even to define from the exposed section the precise limits of the different systems of brickwork. As indeed in the upper standing pile, the grey weather-beaten bricks of the highest stage gradually merge into the vitrified stage below, so do the blue vitrified strata gradually merge into a mass of fine light-yellow brickwork lower down, the intermediate or conterminous layers being green, and what is still more remarkable, so does the third or yellow stage merge into a roseate, pink division which evidently formed the fourth or centre stage of the building.¹ The original brickwork from the red stage upwards is generally of one uniform character. I thought at one time I could trace a gradual diminution in the dimensions of the bricks, those of the pink stage being 14 inches square and 4 inches deep, of the yellow $13\frac{1}{2}$ inches by $3\frac{1}{2}$, of the blue $12\frac{1}{2}$ by $3\frac{1}{2}$, of the grey at the summit 12 by 3 ; but previous travellers have given these measurements differently, and I could not obtain a sufficient number of detached specimens "in situ" to verify the distinction.² Indeed I am not sure but that the interior construction of the whole mass, from the red stage (or even from the base) upwards, may have been absolutely the same ; and that the distinctive characteristics of colouring which rendered this temple especially remarkable, and which were certainly in a great measure dependent on the materials employed, may have been exclusively considered near the exterior surface, where of course they would be alone visible.³ At any rate the description of brick, as exposed in the trenches, though differently coloured, was the same throughout the four upper stages, being kiln-baked and of the greatest hardness, while the lime cement, laid in very thin layers

¹ In following down the line of the trenches, it is to be observed that I number the stages from the summit, while in my subsequent attempt to restore the seven successive stages I commence the numerical series from the base.

² This theory of progressive diminution must certainly be abandoned, as far as regards the thickness of the bricks. I have found indeed on working out all my measurements of series of layers, that no uniform scale can be adopted, the bricks varying in thickness throughout the upper stages from three to four inches.

³ It will subsequently appear from the inscription found at the Birs that the *heart* of the pile must have been constructed of *libbin* or crude brick, and that the walls accordingly through which the trenches penetrated could have only been the exterior coating. The interior core of crude brick at any rate was never reached, and could not, I think, have existed originally above the fifth stage from the base.

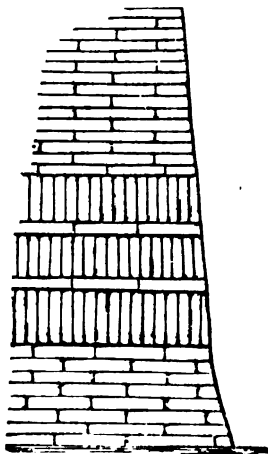
(not more than one-fourth of an inch in depth, in some places and never perhaps exceeding three-fourths of an inch,) was of the finest possible quality, and was entirely unmixed with reeds. I obtained my measurements of distances throughout the four upper stages by counting the layers of brick, but as I could not be sure of the uniform thickness of the bricks which varied from three inches to four, nor of the allowance to be made for the average layer of cement, varying from one-fourth to three-fourths of an inch, I do not pretend to consider them as any thing more than approximations. It will be seen, however, when I proceed to restore the elevation of the temple, that the measurements come out with sufficient accuracy.

From the summit of the mound to the fifth or red stage, the trenches were of no further use than in laying bare a double section of the brick-work : from that point downwards they were more satisfactory. The horizontal opening along the S. E. face of the mound, from one trench to the other, exposed the entire wall of the red stage, showing its height to be 26 feet, and revealed some peculiarities of building which require to be specially noticed. The bricks of which it was composed were formed of red clay and but half burnt, being that species of building material which is called by the Arabs of the present day *libin* (Heb. לִבְנָה) and which is quite distinct from the *Ajúr* or *Tabook*, which is hard and kiln-baked.¹ These bricks, measuring 14 inches square and 5 inches in thickness, were laid in crude red clay, mixed up with chopped straw, the layer of this most indifferent cement being 2 inches in depth. The bricks were so soft as to yield to the blow of a hammer, and the clay cement crumbled under the touch. They thus formed the most unfavourable materials for building that could possibly have been devised ; and it is difficult to conceive how they could have supported, for any length of time, a mere exposure to the atmosphere. To obviate, in some measure, the inadequacy of such a bulwark to resist the interior pressure, the wall slanted inwards at an angle of two or three degrees, and additional strength was given to it by a slightly projecting plinth, formed of the

¹ Rich says that לִבְנָה signifies "brick, of course the burnt sort from the root"—*Bab. and Pers.*, p. 69—but I question this very much. The name was given from the *white* colour of the clay employed, and has nothing to do with burning. The distinction in all the inscriptions between *libin* and *agur* is precisely that now observed by the Arabs ; and in the famous passage of Genesis, chap. xi. v. 3, I understand the meaning to be, "Let us make bricks of *libin* (or 'white clay'), and then burn them." If לִבְנָה implied "burning the bricks," what would have been the use of adding the verb נִשְׂרַפָה ?

same red bricks laid on their edges, and by an abutment at the base.¹ The most remarkable feature, however, in regard to this wall, was that at several points along its face, brickwork of a totally different class was found running up against it, to at least two-thirds of its height. This brick-work, although formed of the very best materials, was everywhere ruined; so much so, indeed, that I could not determine whether it belonged to the walls of chambers built on the platform at the foot of the wall, or whether it did not rather represent the débris of a series of lateral buttresses run up against the wall to support it. Of two things only could I be sure: Firstly, that it had not formed an exterior casing; and secondly, that it was of the same date as the original structure, the bricks being usually marked on their lower face with Nebuchadnezzar's stamp (as I should have observed was uniformly the case, though at irregular intervals, throughout the upper stages), and the discovery of the cylinders in the inner wall proving that portion of the building to be of the same age. It was certainly most extraordinary to find this outwork of masonry of the best description completely ruined, while of the very inferior and yielding wall within there was not a brick displaced; nor can I now (unless by supposing artificial mutilation in the one case, which did not extend to the other)² account for the condition of these two contiguous specimens of Babylonian architecture being exactly in an inverse ratio to their capability of resistance. The bricks of the red

¹ The corner of the wall exhibited something of this appearance—



² I shall subsequently suggest a reason for the intentional destruction of the outwork on the platform by later explorers of the mound.

wall, I must add, were in no case stamped, owing, I presume, to their inferior quality; at any rate the want of the stamp could not indicate their belonging to another age, against the evidence of the cylinders, carefully imbedded at the corners. Below the fifth or red stage, for a space of about 26 vertical feet, the trenches traversed a mass of crumbling brick-work, of the same character as the lateral walls abutting on the upper stage. I thought I could trace a wall in the southern trench, about half-way in horizontal distance between the perpendicular wall of the fifth or red stage above, and the perpendicular wall of the seventh or black stage below; but I could not be certain, as there had evidently been a series of buildings on the lower platform abutting on the sixth stage, and on the sixth platform abutting on the fifth stage; and now that these buildings, composed precisely of the same materials as the wall of the sixth stage, were all crumbling in ruin, it was impossible to discriminate their respective sections. Had there been any well-defined wall in this interval, M. Toniatti would have followed it vertically, so as to have exposed its facing. At one point, and that precisely where I subsequently remarked a very suspicious-looking line of masonry in the side of the trench, he did thus attempt to sink a shaft perpendicularly along what seemed to be a line of wall, but he was soon arrested by an aperture leading into a vaulted chamber, within which he penetrated, at imminent risk, for a distance of ten or twelve paces, observing by the light of a candle that all further passage was choked up with rubbish, and that the interior of the chamber had evidently fallen in. From the open part he brought out the trunk of a date-tree, hollowed out, as is the custom at the present day, to serve as a channel for water, but otherwise in a very fair state of preservation, although the tree must have been cut down above twenty centuries ago; for the bricks of which the chamber was composed bore the Nebuchadnezzar stamp, and I should question if the chamber could have been entered since the Greek occupation of Babylon. As there were above thirty feet of crumbling débris without the slightest tenacity whatever, pressing perpendicularly on the sides of the trench, and under which the chamber appeared to penetrate, it would have been a work of extreme danger to have cleared it out, and M. Toniatti therefore reserved its examination until my arrival. A few hours, however, before I visited the spot, the trench itself had given way, bringing down with it a shower of rubbish from the sides; and the chamber being thus again buried to a depth of fifteen or twenty feet, I did not think it worth while to re-excavate the entrance. From the position of this chamber I judged it to have been a gallery opening from the platform of the seventh stage into the wall of the

sixth stage, and I think it was in some way connected with the hydraulic works which supplied the temple with water. Although little was thus accomplished in clearing out the sixth stage, I here obtained some important measurements. By placing a flag-staff on the slope of the mound beyond the trench, but in the exact line of the lower or black wall which I shall presently describe, and by then measuring with the tape horizontally to the nearest point of the red wall, which insured the line being drawn at a right angle, I obtained a distance of 42 feet for the aggregate width of the seventh and sixth platforms on the S. E. face. I had already obtained a measurement of 12 feet for the platform of the red stage at the back of the temple, or on its N. E. face; and supposing the construction and recession of the gradines from the front to have been regular, these elements, with the square of the red stage accurately fixed at 188 feet, are sufficient for the restoration of the design.

It remains for me now to notice the wall of the lower stage. Towards the base of the mound, M. Tonietti's southern trench struck on the corner of a well-defined wall; and according to my instructions he immediately sunk a shaft in front of it, and subsequently opened the wall somewhat beyond the breadth of the trench, or for about 10 feet. He had only reached to a depth of 17 feet when I came to examine the work, and 9 feet more of excavation would thus have been required to reach the base of the wall, if, as appeared probable, it was equal in height to the walls of the two platforms immediately above; but being pressed for time, I did not think it necessary to continue the shaft. The wall was beautifully formed of bricks of the same size as those of the next superior stage, 14 inches square by 4 inches deep, which may be taken as the normal type in the lower stages; but there was this peculiarity in the construction, that the bricks were laid in bitumen, and that the face of the wall to a depth of half-an-inch was coated with the same material, so as to give it a jet-black appearance.¹ The eastern trench, as I have before observed, appeared from the direction to have run outside the eastern angle of the lower stage, and not to have been sunk deep enough to cut its N. E. face. The line of the southern trench, on the other hand, must have run somewhat within the southern angle; and much as I should have wished to lay bare the corners, where there are almost certainly commemorative cylinders, I shrunk from the enormous labour of continuing lateral galleries from either trench along the face of the wall

¹ Porter remarked fragments of bitumen towards the base of the mound, and even brought away a specimen 10 inches long and 3 in thickness. (*Travels*, vol. ii, p. 315.)—This had probably been a part of the coating of one of the recesses of the lower wall.

so as to reach the angles, there being at least 40 feet of perpendicular débris above the spots where I should expect the cylinders to be deposited.¹ Another remarkable feature of this lower wall was, that in the small portion laid bare there was one of those indented rectangular recesses which have been found at Khorsabad, Warka, and Mugheir, and which may be now, therefore, regarded as the standard decoration of the external architecture of ancient Assyria and Babylonia.

The trenches, on approaching the level of the plain, traversed a mass of crude, sun-dried bricks,² which formed the foundation of the temple, and which as we shall presently see from the cylinder inscription, belonging to the primitive edifice, was left untouched by Nebuchadnezzar when he rebuilt the upper stages. A curious illustration of this difference of age is also to be found in the varying direction of the lines of brick-work, as occurring in the foundation and in the temple which it supported; the corners in the upper building nearly facing the four cardinal points, while the lines of the sun-dried bricks at the base are deflected 16 degrees to the east. It is impossible, of course, that this great discrepancy between the two designs can have anything to do with astronomical variation; but for the small error from the true bearing, amounting to $4\frac{1}{2}$ degrees, which is apparent above, a natural explanation may very well be sought.³ We may assign the error, it is true, to imperfect instruments, but I should prefer explaining it by supposing the lines to have been laid on a day when the sun had $4\frac{1}{2}$ degrees of eastern amplitude. Leaving this question, however, for future discussion, I have here only to add, in reference to the foundation platform of the temple, that in the eastern trench it was quite impossible to estimate its true height above the plain, as the line of excavation fell upon the outskirts of the subsidiary mound on the N. E. face of the temple, which

¹ On laying down the ground-plan of the temple, I find that the right-hand trench must have run very near the southern corner of the lower stage; and I now, therefore, regret not having continued the gallery a little farther on. To my eye, however, on the spot, the distance of the angle from the trench appeared to be greater.

² As there is a general impression that the ordinary character of Babylonian building is a mass of crude sun-dried bricks laid in reeds, I may here observe that the employment of reeds was absolutely unknown to the Babylonians, except to prevent soft bricks from sinking into the bitumen when that material was used as a cement. All the ruins where the reeds are observed are Parthian, such as the upper wall of *Babel* (Rich's *Mujellibeh*) *Atkerkus*, *Al Hymar*, *Zibliyeh*, and the walls of Seleucia. The baked bricks of Babylon often, however, bear the impression of reeds, from having been laid on reed matting when in a soft state.

³ M. Fresnel gives the error from the cardinal points at five or six degrees, and supposes this to be the magnetic variation of the spot (see *Journ. Asiat. for*

no doubt formed the grand entrance, and was a part of the primæval building; while in the southern trench, also, from the very gradual slope of the base, and the difficulty of ascertaining where the true level of the outside plain was reached, I could not venture on anything more than an approximation. To my eye, from the true base of the black wall (supposing nine feet to have remained uncovered) to the level of the alluvial soil was not more than five vertical feet; but if the calculations of Rich and Porter should be at all correct, in assigning a height of 235 feet to the mound, inclusive of the pile at the summit, I must have made some grievous error in the measurements which I have recorded, measurements which were partly obtained by counting the layers of bricks, partly by the actual tape-line, and partly by estimate, and which give at most 156 feet for the entire elevation. I did take the altitude of the Birs-Nimrud, trigonometrically, fifteen years ago, and to the best of my recollection the result was about 160 feet; but I have mislaid the memorandum of the measurement. On the present occasion I had no instrument with me but a surveying compass, and could not therefore repeat the experiment; so that, as I cannot claim to place estimated or imperfectly remembered numbers above that which appears to be a recorded observation on the part of Rich, and as the discrepancy between our aggregate results is too great to be adjusted by any petty correction either on one side or the other, I must leave the question of the detailed measurements in suspense between us, until the entire altitude of the mound is determinately fixed¹ by some competent authority.

July, 1853, p. 59). The true magnetic variation, however, at Babylon, determined by a series of azimuths, is four degrees. The compass which I used had an error in itself of one degree the other way; and as my magnetic bearing was $52\frac{1}{2}$ degrees for the line of the S.E. face, I thus give the true error of the building at $4\frac{1}{2}$ degrees east. Captain Jones, however, who is now surveying at Babylon, will be probably able to take a direct azimuth with the line of the red wall, which will determine the error of the building astronomically, and be independent of magnetic variation and the difficulty of adjusting such rude instruments as prismatic compasses.

¹ Captain Jones will certainly determine this point during his present survey of Babylon, and I may perhaps receive his measurements, obtained by the theodolite, in time to accompany the present paper.

Since writing the above, I have received from Captain Jones a note of his trigonometrical observations at the Birs. He worked upon a very carefully measured and levelled base, and employed a full-sized surveying theodolite, reversing the telescope at each observation, to insure perfect accuracy of the angles; and the result of the operation, both by protraction and calculation, was to determine the vertical distance from the water-level of the plain to the highest point of the ruin, at the summit of the mound of the Birs, at $153\frac{1}{2}$ English feet. As this measurement, then, is only a few feet ($2\frac{1}{2}$) below the aggregate of my estimated height, I have not thought it worth while to make any further correction of the numbers I have

Before closing my description of the works at the Birs, and proceeding to restore the temple, I must add a few general remarks on the mound, which may be of use to future excavators. Of all the Babylonian and Assyrian ruins which I have ever opened, the Birs is undoubtedly the most difficult to deal with. The mound is composed either of solid brick-work, or of a mass of *débris* formed of crumbling bricks and pounded mortar, which has no tenacity whatever, and which, immediately it is undermined by a vertical trench, is liable to come rushing down in an avalanche of rubbish; it is only where a trench is run along horizontally, under the shelter of one of the perpendicular walls, that the labourers can work with any degree of security; and this peculiarity seems to have been recognised in ancient times, and even to have been taken advantage of, by some adventurous explorers; for there appear to be traces of old horizontal trenches at various points of the mound, and in excavating along the red wall we had ample evidence that we were actually following in the footsteps of earlier explorers. The lateral walls, indeed, which must have stood upon the sixth platform and abutted on the fifth stage, bore strong marks, as I have already observed, of artificial destruction; and at the very foot of the red wall itself, at 26. vertical feet from its summit, the labourers found three baskets, precisely similar to those they were themselves using for carrying away the *débris*, with this sole exception that the baskets were made of India-palm, instead of Baghdad-date, fibre. At what period the excavations may have taken place, which were thus unexpectedly revealed to us, I will not pretend to decide; but I could only infer, from the discovery of the baskets, that we were but repeating an experiment of some earlier antiquaries or treasure-seekers; and that, in fact, the mound had been already probed and perforated at a hundred different points, and that it owed much of its irregular appearance, and the enormous accumulation of *débris* near the base, to the attacks which had been made on its surface by the hand of man.

It may be doubted if this temple ever possessed any valuable works of art, such as sculptures or statues. I saw no traces of slabs or marbles,¹ nor indeed of any substance but brick and mortar. Treas-

adopted. How Mr. Rich, who was a scientific observer, could have fallen into the error of exaggerating the height of the mound by one-third, is quite inexplicable; and it is equally strange that Porter, and all succeeding travellers, should have adopted the measurement without suspecting its accuracy, or taking any pains to verify the details.

¹ Rich, however, observes that the whole surface of the mound is strewn with pieces of black-stone, sandstone, and marble. (*Bab. and Pers.*, p. 76.) Such may

surely it of course originally contained, but of such it must have long ago been rifled. All that can be now looked for are commemorative records of the time of Nebuchadnezzar. The two perfect cylinders which I obtained from the southern and eastern angles of the wall of the red stage, belong to that series of local records which were deposited by Nebuchadnezzar at the angles of each successive platform of the edifice when he rebuilt the temple. Wherever the uninjured angles of a stage can be laid bare, there will other specimens of the same class undoubtedly be found ; but the inscription will be the same upon all, and the relics will therefore be merely of value as curiosities. Already I possess, from the *débris* in the trenches, two fragments of a third cylinder, which must have rolled down from one of the upper stages ; but the sole advantage of this relic is to furnish a third copy of the first column of the inscription. An accumulation of specimens may supply a few variant letters or supplementary phrases, but will be otherwise of no interest. But I still think it highly probable that there are other barrel cylinders to be found among the *débris* of the chambers erected upon the platforms, or along the line of the grand entrance on the north-eastern front, which are of greater importance. I obtained, indeed, at the Birs a small fragment of such a cylinder, which must have been of the largest size, and which contained probably an amplified description of all the works and achievements of Nebuchadnezzar, recorded on the famous slab at the India House ; for I find on this fragment a notice, in some detail, of Nebuchadnezzar's expedition to the Mediterranean and his conquest of the kings of the West, to which there is a cursory allusion in the great inscription, from the twelfth to the twenty-ninth line of the second column. Should excavations be resumed at the Birs-Nimrud at any future time, either on account of the British Museum or of other parties, I would especially recommend the N. E. face of the mound to the attention of explorers. Here was undoubtedly the grand entrance to the temple, the large mass of ruins at the foot of the great mound forming a sort of vestibule, which opened on the staircase leading from the second to the third platform from the base.¹ The *débris* above the stages of brick-work would be probably more extensive on this face than in any other quarter, owing to the greater space offered for its accumulation by the receding platforms, and excavation therefore would be more laborious ; but, judging from the single precedent of Mugheir, it would

have been the case when he visited the mound, but I can confidently assert that at present no such fragments exist.

¹ The outline of this vestibule is conjecturally laid down in my restoration of the N.E. profile of the temple.

seem to have been along the line of the entrance that the barrel cylinders were alone ranged, which bore inscriptions of a more general nature, and not exclusively appropriated to the record of one particular building; and if, accordingly, as I cannot help anticipating, the discovery awaits some future explorer, of Babylonian annals recording Nebuchadnezzar's conquest of Egypt and Judæa, the grand vestibule of the temple of Borsippa, affording the best-defined and most favourable locality at present available for examination, will be, I think, the spot where the treasure will be first disclosed.

III.—PROPOSED RESTORATION OF THE DESIGN OF THE TEMPLE.

I have not thought it necessary in the foregoing account to give any detailed description of the *Birs-Nimrud* as it existed before I opened trenches on its surface, nor, as I proceed with the narrative, will this matter occupy much of my attention. The notices of Rich, of Porter, of Buckingham, of Fraser, and of Layard, have pretty well exhausted the descriptive branch of the subject, and may be consulted and compared with advantage. My own aim is rather to show in how far my operations have verified the conjectures of my predecessors, or have resulted in novel discoveries; and I accordingly proceed at once to explain the restoration which I would propose for the design of the edifice.

On returning to my tent at the foot of the mound, after my first survey of the works, I reflected that there were certainly six or seven distinct stages to be recognised from the foundation platform to the summit. The marked difference of colouring had also forcibly impressed me; and I was soon after struck with the coincidence, that the colour black for the first stage, red for the third, and blue for what seemed to be the sixth,¹ were precisely the colours which belonged to the first, third, and sixth spheres of the Sabæan planetary system, reckoning from the outside; or, which is the same thing, were the colours which appertained to the planets Saturn, Mars, and Mercury, by whom those spheres were respectively ruled.

I had obtained no indication whatever at that time of a planetary design in the construction of the temple, from inscriptions or from other sources; but still it occurred to me that this agreement of numbers and colouring could hardly be accidental. Subsequently, I found from the cylinder record that the temple was dedicated to "the planets of the

¹ Observe that the numerical series now proceeds from the base, and that this order will be maintained throughout the subsequent description.

seven spheres ;" and I announce it therefore now, as an established fact, that we have, in the ruin at the Birs, an existing illustration of the seven-walled and seven-coloured Ecbatana of Herodotus,¹ or what we may term a quadrangular representation of the old circular Chaldæan planisphere. There is some difficulty with regard to the seven colours, for two reasons: firstly, because we do not know the exact chromatic scale of the ancients; and secondly, because the colouring, in some of the stages, was probably merely external, and the original surface of these stages has not been exposed. Following, however, the ordinary arrangement of the planetary colours, and the well known order of Saturn, Jupiter, Mars, Sol, Venus, Mercury, and the Moon, I will now endeavour to explain the design of the temple.²

Upon a platform of crude brick, raised a few feet above the alluvial plain, and belonging to a temple which was erected probably in the remotest antiquity by one of the primitive Chaldæan kings, Nebuchadnezzar, towards the close of his reign, must have rebuilt seven distinct stages, one upon the other, symbolical of the concentric circles of the seven spheres, and each coloured with the peculiar tint which belonged to the ruling planet. The lower stage was 272 feet square and twenty-six feet high; and it was thickly coated with bitumen, to represent the sable hue which was always attributed to the sphere of Saturn. The walls of this stage are still standing in a perfect state of preservation. The second stage, which belonged to Jupiter, was 230 feet square, and, by measurement, also twenty-six feet high, the platform in front, or on the north-eastern face, being thirty-feet in width, while that at the back, or on the south-western face, was only twelve feet. On the two other faces the platform was of equal dimensions, mea-

¹ I may as well thus early state my impression, derived from numerous points of evidence which seem to me conclusive, that Herodotus could never have visited Babylon in person. His description of the city was, I believe, entirely drawn from the statements of Persian travellers whom he encountered in Syria and in Asia Minor; and these statements, which were probably not very clear or accurate at first, were certainly not improved by being retailed to the Greeks at second hand. It is thus far from improbable that the temple of the seven spheres at Borsippa may have supplied hints both for the description of the temple of Jupiter Belus at Babylon and for the Median Ecbatana, though in reality it had nothing whatever to do with either one locality or the other. My reasons for adopting this view, which, although already familiar to the French Academy from the advocacy of Quatremère, may seem heretical to the English reader, will be given in detail in the geographical section which I shall append to the present paper.

² It may be remembered that I suggested, fifteen years ago, a Sabæan explanation for the parti-coloured walls of Ecbatana, in a memoir published by the Royal Geographical Society; (See *Geograph. Journ.*, Vol. X., Part I., p. 127). and that I there compared the colours of Herodotus with those given by *Nisami* in his poem of *Heft-Peiker*.

asuring twenty-one feet upon either side; and I may here note that these horizontal proportions seem to have been retained throughout the construction of the whole seven stages. It is not very certain what colour we are to attribute to Jupiter. The bricks, forming the second stage, are burnt to a rich red brown, nearer, perhaps, to raw sienna than any other modern colour. In the ordinary astrology of the East, the term applied to the sphere of Jupiter is *Sindali*, or Sandal-wood-colour. In the catalogue of Herodotus the corresponding word is *Σανδαράκινος*, which is usually rendered by "orange." I have seen the second sphere coloured on a modern astronomical ceiling at Kermanshah very nearly of the same tint as the bricks of the second stage at Birs-i-Nimrud. Upon the two side platforms (those of the south-eastern and north-western faces) of the first and second stages, there seem to have been a series of chambers abutting upon the perpendicular walls of the second and third stages. The same mode of construction, indeed, was probably continued to the summit, for it must be remembered that in such positions alone could accommodation have been provided for the priests and attendants of the temple, the back platforms being too narrow to afford space for building, while the north-eastern front was, I conceive, entirely taken up with staircases and the other accessories of approach. There may also have been vaulted chambers leading from these side platforms into the interior of the mass of masonry. I have noticed the discovery of one such chamber on the platform of the lowest stage; and it is not probable that this was a solitary "souterrain."

The third stage, which was dedicated to Mars, was found by measurement to be 188 feet square, and again twenty-six feet high, the agreement in altitude between this stage and the last authorizing me, as I think, to apply the number in question to the lower stage also, which, however, as I have mentioned, was only excavated to the depth of seventeen feet. If there had not been some special reason for depicting the third stage of a bright red colour, it is inconceivable why the builders, having at their disposal the finest burnt brick and the most tenacious mortar, should have employed such indifferent materials as *Libbin* and red clay—materials, indeed, which were notoriously so deficient in strength that buttresses and abutments were required for the support of the wall, and an inclination even was given to it of some degrees from the perpendicular, to the utter destruction of all architectural symmetry. The reason, of course, for the preference of the crude brick was the exact agreement of its natural hue with the colour which was appropriated to Mars, the Chaldeans, Greeks, Persians, and Arabs having all agreed in repre-

senting this planetary god as "red," from the ruddy aspect, no doubt, which the star bears in the heavens.

The fourth stage must have been that of the Sun, whose sphere is described as "golden." No where upon the mound could I satisfy myself that the exterior surface of this stage was exposed. The debris, intermixed with walls, which was heaped upon the platform of the third stage on the south-eastern face, belonged no doubt to a series of supplementary chambers, as upon the lower platforms ; and on the south-western face or back of the temple,—although the earth was sufficiently cleared away to expose the breadth of the platform, and even, as I think, to show the position of the southern corner—the face of the wall was entirely broken away, as if with blows of the pickaxe. Indeed, I cannot help suspecting that the fourth stage, or that of the Sun, was originally gilt, or cased with gold plates (*Khuraz vashalbiau*, or "clothed with gold," according to the phraseology employed by Nebuchadnezzar in describing his other gilded palaces and temples); and that it was the discovery of this fact which prompted the later possessors of the country to sink trenches along the line of the wall, and after despoiling it of its casing, to extend their explorations to the walls of the stages immediately below, in search of the same rich material. The horizontal dimensions of the fourth stage, according to measurement, at the southern corner,—that is, by subtracting the breadth of the platform, as seen at this corner, from the inferior stage,—must have been 146 feet square. If the design of the original building had been perfectly symmetrical, the height of the fourth stage would have been twenty-six feet, like the two measured stages below ; and such were the proportions which I expected to find when I first began to restore the temple ; but although I had no positive measurements of the height of any of the upper walls—owing to the line of the trenches, which, from the base, thus far had run outside the original profile of the mound here falling within it—it soon became apparent that the standard of the lower stages could not apply to the superior platforms. As the section, indeed, of the trenches—exhibiting from the top of the third stage to the commencement of the slag which formed the sixth stage a solid and continuous mass of brickwork, of which the lower portion was formed of bricks of a pink colour, kiln-baked, but considerably lighter than those of the second stage, while the upper portion was formed of yellow bricks—admitted of no more than thirty vertical feet for the united height of the two intervening terraces, that is, for the fourth and fifth stages of the temple, I could not doubt but that the dimensions of the stages, from this point, were, in regard to elevation,

considerably diminished. The pink and yellow layers are so intermingled, where the zones, as exposed in the trenches, appear to join, and generally, indeed, wherever the bricks can be examined around the slope of the mound, that it is impossible to say exactly where one division ends, or the other begins. At no point, however, could I estimate the height of the fourth stage, from counting the layers of pink bricks, at more than sixteen feet (in some places it seemed reduced to twelve feet); nor the height of the fifth, or yellow stage, at less than fourteen feet; and I think, therefore, I am justified in assuming a height of about fifteen feet for each of the stages in question. The same proportions, it will presently be seen, also apply sufficiently well to the remains of the sixth and seventh stages; and the measurement accordingly of fifteen feet is adopted in my proposed restoration of the profile of the temple as the standard height of all the upper stages; but whether the numbers of twenty-six and fifteen have any architectural relation to each other, or whether the decrease in the elevation of the platforms refer to some astronomical conceit, indicating, in fact, the supposed diminution in size of the interior celestial spheres, I cannot undertake at present to determine.

With regard to the fifth or yellow stage, which should have belonged to Venus, I may note as follows: Firstly—the dimensions must have been, I think, 104 feet square, and it is very possible that one of the corners near the base may have been visible when Porter visited the mound, now thirty-five years ago, although at the present time I could not discover any trace of such an angle.¹ Secondly, in respect to height; the limits of the fifth stage are not very accurately marked, either above or below. In assigning it, indeed, a height of fifteen feet, I pass somewhat beyond the range indicated by the very light-coloured masonry, supposing the intense heat which was employed to vitrify the superior stage to have extended its influence for about two feet into the mass of yellow bricks below, changing the colour to green, and, in fact, producing the effect of an imperfect vitrification. And thirdly, with regard to colour; the hue of Venus, in the planetary scale, is not well defined. I have found it depicted as white, as a light blue (ازرق *azrak*), and as a light yellow. Herodotus even exhibits some confusion on this head, for he gives white and silver in his notice of the walls of Ecbatana as two different colours. My own belief is that Venus was figured in the temple of Borsippa as light yellow.²

¹ Porter visited Birs-i-Nimrud in 1829, and he notices that the wall of fine brick presented itself in an angular form at a short distance down the slope of the mound from the summit. See *Travels*, vol. ii., p. 313.

² Rich, in describing these bricks, calls them “white, approaching more or less

I have already explained my views with regard to the sixth stage in sufficient detail. I allow fifteen feet for its altitude, about five feet of vitrified strata still forming the solid cap of the mound, and ten feet of the pile at the summit belonging, I think, to this same indurated stage. It may be objected that the whole extent of the standing pile exhibits, at present, one uniform appearance of dark, weather-beaten brickwork, and that there is no trace of its having been divided into two stages, or having supported a superstructure ; but I reply that the large detached masses of vitrified matter, now cumbering the upper platform, have most unmistakably split off from the lower portion of the pile ; that this vitrified matter is absolutely the same as that of which the platform itself is composed ; that in fact we may very well suppose the fire which was employed to vitrify the mass to have only taken full effect towards the edge, leaving the pith of the brickwork, which now forms the base of the standing pile, almost unscathed. I suppose this stage to have measured sixty-two feet square, and to have presented a dark blue appearance, the exterior surface which is now every where broken away, having been, in fact, one uniform mass of slag. The sphere of Mercury, I need only add, is everywhere represented as blue ; and there is this further curious coincidence in the present case, that the colour is sometimes especially described as a *burnt* blue, in reference, it has been suggested, to the immediate proximity of the planet to the Sun.¹

The seventh stage, which belonged to the Moon, alone remains to be considered. According to my view of the regularity of the receding platforms, the base of this stage could have measured but twenty feet square, so that, if its height were fifteen feet, as I have calculated the height of the three stages below it, it must have presented almost the appearance of a cube. The dimensions, however, of all the stages above the third are very doubtful. As the height, indeed, of the standing pile at the summit is thirty-seven feet, if my scale of elevation should be correct, there will still be, after deducting ten feet at the base of this pile for the sixth stage, and fifteen feet higher up for the seventh stage, a remainder of twelve feet of actual masonry to be

to a yellowish cast, like our Stourbridge or fire-brick." Bab. & Pers., p. 99. The Arabs, too, apply the term of *Biyas*, بياض to the bricks in question.

¹ Norberg, in his Sabæan Lexicon, after noticing the *burnt* appearance of Mercury from the work of M. Abi Taleb, adds, "Sicut etiam solatus et perustus, cum ceteris planetis soli vicinior sit, a Poëtis fingitur. Dict. Poet. Stephan., p. 393." But I know not to what authority he alludes ; apparently to some dictionary of the poets, with which I am unacquainted. See the Onomasticon Codicis Nasaria, p. 98.

accounted for. This portion then of brickwork I propose to allot to a superstructure, or chapel, which may have crowned the pile, as in the description that Herodotus gives of the temple of Belus at Babylon—a description which, in all probability, was borrowed from this site. If such a chapel really existed, containing the “ark” or “tabernacle” of the god,¹ its height was probably fifteen feet, like that of the stage which supported it; and three feet of the side-wall may thus be supposed to have been alone broken away at the summit.

To return, however, to the seventh stage. On the front, or north-eastern side, the face of the standing pile, about half-way up, is so smooth and regular, that I can hardly doubt its representing the real external surface of the brick-wall; and here accordingly, for a space of about fifteen feet, I suppose we have the actual facing of the seventh stage, distinguished from the broken fragments of the sixth stage below, and the tapering wall of the chapel above. At the same time, it must be owned that there is no perceptible difference of colour between the supposed three divisions of the standing pile; that, in fact, the centre portion, where we have the original wall exposed, presents the same appearance as to colour as the broken brickwork above and below; and on this head a difficulty certainly exists. It must be remembered, however, that to obtain brick of the colour appropriated to the Moon, namely, a light or silvery green, was not possible. A casing of some sort must have been employed; and I fall back accordingly on the traditionary description of Herodotus, supported by the inscriptions, which often mention the *takh-lupta kaspā*, or “coating of silver,” employed in the decoration of walls and pillars; and conjecture the upper stage of the temple of Borsippa to have been thus in reality encased with silver plates,

¹ The Babylonian gods appear to have each had several arks or tabernacles, distinguished in the inscriptions by the old Scythic or Hamite names which they bore from the remotest antiquity. The tabernacle itself is indicated by the same signs, which represent “a ship,” and of which the Semitic equivalent or synonym was *Ehṣpa* (Chaldee 𐤠𐤬𐤱𐤲). And some of the bilingual vocabularies exhibit complete lists of the names. The name which thus occurs in the last line but one of the third column of the great East India House inscription, in connexion with the temple of the planets of the seven spheres at Borsippa, and which is also the proper name of a river, is explained in the vocabularies as the special appellation of the ark of the god Nebo; and it may be presumed, therefore, that although the temple of Borsippa was designed and named after the seven spheres, the particular god who was worshipped there was Nebo, or Hermes, who, indeed, was supposed to have the arrangement of the heavenly bodies under his particular control.

I shall quote many notices as I proceed of the special worship of Nebo at Borsippa.

which have now entirely disappeared. This of course is a mere conjecture, but it is one to which the previous argument, and our general knowledge of Babylonian architecture obtained from the inscriptions, gives some probability.

With regard to the chapel, which I conjecture to have crowned the summit of the pile, the seventh stage being entirely covered by it, I would, firstly, refer to the account of Herodotus, which states that the "eighth" or upper tower of the temple of Belus was in reality the shrine of the god, containing the sacred bed and table of gold ; and in the second place, I would compare the tomb of Cyrus at Pasargadæ, which is built on the same general plan as the Birs-Nimrud, in seven successive stages, of which the inferior are of much greater height than the upper, rising one above the other, and the seventh serving as a pedestal for the tomb.

The only other point which it occurs to me to notice is in regard to the rhomboidal series of holes which transect the entire mass of brickwork on its two faces, and which thus cross each other at right angles throughout the building. I was at one time under the impression that the rhomboidal arrangement of the channels was similar to the general plan of the temple ; that is, that the proportional distances, vertical and horizontal, were the same in both cases. But I found, on further examination, that I could not verify this identity, the distribution of the channels being far from uniform throughout the building, and the proportions, indeed, of the temple itself being irregular, both as to the height of the stages and the breadth of the platforms.

I cannot, of course, positively assert for what purpose these transverse channels were constructed. They are generally called air-holes ; and Porter supposes them to have been designed in order to admit a free circulation of air, and thus to have assisted in drying the building. My own impression, on the contrary, is, that they were drains, being intended to carry off any moisture from rain or dew that might percolate through the upper brickwork ; and I further believe that they are especially designated in the inscription of which I shall presently give a translation, by the phrase *muzé mié*, "exits of the waters," the bulging of the brickwork, and the ruin of the ancient temple being attributed to the little care that was bestowed on them.

IV.—INSCRIPTION ON THE CYLINDER.

I now proceed to explain the inscription upon the Birs cylinders, but in a mere popular sketch, such as that upon which I am engaged, it is impossible to enter upon the many difficult questions, both of reading and etymology, which must belong to translations from a language of which, as yet, we know comparatively so little as the Babylonian. To give any completeness, moreover, to such an inquiry, it would above all be necessary to compare together the many independent documents which we possess describing the works of the Babylonian kings; as it is from the context only that we are able in many passages to ascertain the true meaning of certain words. The inscriptions to which I particularly allude, as requiring comparison for their mutual illustration, are—first, the famous slab at the East India House, which is the most perfect and elaborate of all Nebuchadnezzar's records;¹ 2nd, Bellino's cylinder (now in the possession of Sir Thom. Phillips), which is an abridgment, with much independent matter however, of the same domestic history;² 3rd, Rich's cylinder (plate 9, No. 4, of *Babylon and Persepolis*), recording the clearing out of the old eastern canal which supplied water to the great lake or reservoir of Babylon from the head of the Sura or Sippara river; 4th, the Senkereh cylinder,³ commemorating the rebuilding by Nebuchadnezzar of the temple of "the Sun" at *Larrak*; 5th, the Birs cylinder, of which a translation will presently be given, describing the re-edification, by the same monarch, of the temple of the "Seven Spheres" at Borsippa; 6th, the Mugheir cylinders, deposited by Nabonidus in the angles of the second stage of the temple of "the Moon" at *Hur*, when he repaired the edifice; and 7th, the great Nabonidus cylinder, unfortunately in fragments, which was also found at Mugheir, and which describes all the architectural works of that monarch in Babylonia and Chaldæa, with additional and invaluable notices of the early builders.⁴

¹ This was printed in copper plate at the expense of the East India Company, and the impressions are not uncommon.

² A fac-simile of this inscription in lithograph was published by Grotefend in 1848.

³ Found by Mr. Loftus in 1854, when excavating for the Assyrian Fund Society. There are four copies of this inscription, two on cylinders and two on bricks, but they have not yet been published.

⁴ Mr. Taylor's discovery of these cylinders during his excavations at Mugheir in 1854, is described in the *Journal of the Royal Asiatic Society*, Vol. XV,

I have myself carefully collated all these documents,¹ and have further consulted all the Assyrian architectural inscriptions, which are very numerous, and generally of the same tenor as the Babylonian; so that I can hardly doubt my having arrived at the true sense of almost every expression; but to prove the reading and etymology of every word would require a far more elaborate memoir than I am prepared at present to execute. For the benefit of other scholars, however, who are in the meantime disposed to pursue the inquiry, I give the following list of Assyrian architectural inscriptions, which are all well deserving of analysis:—1st, the Shirgát cylinders, containing, at the close of the historical matter, notices of the repairs of the various temples in the city of *Asshur* by Tiglath Pileser I, towards the end of the twelfth century B.C.; 2nd, the inscriptions of the North-West Palace at Nimrud, recording the works of *Asshur-dani-bal* at Calah—the architectural notices are found both in the annals on the great monolith, and in the standard inscription of the palace; 3rd, the broken obelisk from Koyunjik, one column of which is devoted to a record of the various works executed by the same monarch in the city of *Asshur* (Shirgát); 4th, the inscription on the sitting figure from *Shirgát* (B.M. series, pls. 76 and 77), recording the repairs of the same city of *Asshur* by *Shalamabar*, the son of the king last mentioned; 5th, Sargon's inscriptions from *Khur-sabad*, and especially the cylinders lately discovered, which contain a more elaborate notice of the architectural works of that monarch than is to be found in the legends on the Bulls, though even in the latter the description is given in considerable detail; 6th, Sargon's commemorative tablet from Nimrud (B.M. series, pl. 33), describing the thorough repair which he gave to the North-West Palace; 7th, Sennacherib's inscriptions, both on the Koyunjik Bulls and on the cylinders, which are principally devoted to a description of the buildings of the famous palace at Nineveh; and 8th, Esar Haddon's cylinder (B.M. series, pl. 20 to 29), the latter part of which is taken up with a detailed account of the erection of the South-West Palace at Nimrud.² When to this enumeration of *bonâ fide* architectural

part ii, page 263. It is to be hoped that the cuneiform text of all these documents will shortly be published by the British Museum.

¹ (As these sheets are passing through the press, I have consulted another cylinder of Nebuchadnezzar's in the British Museum, from the Rich collection, which recapitulates that monarch's architectural labours at Babylon, and is of value for comparison; later still I have collated the inscription on a cylinder of Neriglissar's which is deposited in the library of Trinity College, Cambridge. London, March, 1856.)

² A few only of these inscriptions, Nos. 4, 6, and 8, have been as yet pub-


















records, it is added that the brick legends and the tablets, both of Babylonia and Assyria, often contain similar notices in an abridged form, some idea will be obtained of the enormous extent of the materials relating to the particular subject of the building of cities, palaces, and temples, the excavation of aqueducts and the repairs of canals, which are now available for examination. Many years must elapse before it will be possible to present all this information to the public in an intelligible form; but, in the meantime, I can conscientiously affirm that I have examined every word contained in the above mentioned inscriptions; and that there are now comparatively few names of objects or expressions which are altogether obscure.

Having given this preliminary explanation of the grounds upon which I venture to translate the commemorative record of *Birs-Nimrud*, I shall now render the inscription in English, merely adding a sort of running commentary on the difficult passages in a series of marginal notes.

The inscription commences with an enumeration of the titles of Nebuchadnezzar, and is valuable in supplying equivalents or synonyms for many of the obscure terms which occur in other documents of the same class. It is impossible that I can here enter on an analysis or explanation of these terms, which, moreover, are only of interest etymologically; but the English rendering will sufficiently indicate the division and proposed reading of the phrases. The king says:—

“I am *Nabu-kuduri-uzur*, King of Babylon;¹ the established

lished; but the original slabs, cylinders, and obelisks may be consulted at the British Museum by those who are interested in the enquiry.

¹ The meaning of this name is still subject to some doubt. I propose to render it “Nebo is the protector against misfortunes,” and would thus explain the elements of which it is composed. In the old Hamite language Nebo had three names—*Nabiu*, *Ak*, and *Pa* (or   , , and ); but the Semites adopted the uniform pronunciation of *Nabu* (   ) as is stated in one of the bilingual vocabularies. The second element, *Kuduri*, I doubtfully refer to the Arabic  “to be troubled by calamity,” remarking that, as a verb, the term is constantly used in the inscriptions to denote the “discomfiture of an enemy,” while, as a noun, it implies the “tribute” imposed on a conquered country, regarded, no doubt, as a calamity.  in Heb. (Job xv, 24) applied to the troubles of war, is a kindred form. The third element is certainly a participle from the root  “to protect,” as the phonetic reading of     

is given in one of the vocabularies for the monogram  or .

Governor,¹ he who pays homage to Merodach,² adorer of the Gods,³ glorifier of Nabu,⁴ the supreme chief,⁵ he who cultivates worship in

¹ I read *Rihuv kinu*—in the first word 𐎲𐎠𐎵 is often replaced by 𐎲𐎠𐎶 , so that we may feel pretty sure the root is 𐎲𐎠𐎶 , “to feed,” and tropically, “to govern.” Compare 𐎲𐎠𐎶 , “a friend.” 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 or 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 , *rihuva*, or *rihuta*, is generally used for “government,” or “kingdom.” *Kinu* is from 𐎲𐎠𐎶 , “to establish;” but this word very often means in the inscriptions “first” or “eldest;” a synonymous phrase is *irru itipisu*, “he who is made ruler.”

² 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 is a doubtful word. I compare it, however, with 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 , also used in the inscriptions to denote “dependence on,” and refer the forms to a root cognate with 𐎲𐎠𐎶 “to obey.” In the E. I. H. Ins. Col. i, l. 4, the equivalent term is *Migir*, which certainly means “obeying” or “honouring,” as *la magira* means “disobedient.” In *Samgar Nebo* (Jer. xxxix, 3) we have perhaps a Shaphel form of the same root (the 𐎲 being used for 𐎶). The meaning is “he who is obedient to Nebo.”

³ *Missakku* here replaces the old Hamite form 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 ; (Rich Cyl. Col. 1, l. 5; and E. I. H. Ins. Col. 1, l. 5); the same term *Missakku* occurs in Bel. Cyl. 3, l. 1; and Mus. Cyl. 1, l. 6. I compare the common Assyrian participle 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 , *vanassik*, and refer to the root 𐎲𐎠𐎶 , “to kiss,” or “pay homage to.” 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 *Ziri* (often written 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 *Tsiri*, see Bel. Cyl. Col. 3, l. 1; and in Assyrian 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 *Zirāti*), is derived from 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 , *siru*, “over, above.” (Compare 𐎲𐎠𐎶 or 𐎲𐎠𐎶 “a high place.”) This title is generally applied to the gods, but 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 𐎲𐎠𐎶 , *rubu siru*, “the supreme chief,” is not an uncommon epithet in Assyrian for the king also. (See Tiglath Pileser Cyl. passim.)

⁴ *Naram*, from 𐎲𐎠𐎶 or 𐎲𐎠𐎶 , requires no explanation; derivatives from this root are of very common employment in the inscriptions.

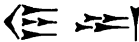
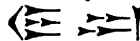



























⁵ The title of *Muda emga* is difficult. In some of Nebuchadnezzar's inscriptions *emga* is joined with a participle, *mutaninnu*. See E. I. H. Ins. Col. 1, l. 18; and Mus. Cyl. Col. 1, l. 11; in others, *mutaninnu* stands alone. See Senk. Cyl. Col. 1, l. 2. *Emga* is perhaps connected with the Assyrian *emuq* (from 𐎲𐎠𐎶 , “to be deep” or “lofty”?) which is an ordinary title of the gods; but for the derivation of *muda* I cannot at present offer a suggestion. *Muda emga* is probably nearly equivalent to the better known *rubu emga*, which first occurs on the *Naramsin* vase in an inscription of the Hamite period (though apparently written in a Semitic language), and which is afterwards found on almost all the bricks of Nabonidus as the special epithet of his father. On the bricks of this king found at Senkereh the title is written *Rubbu maga*, so





honour of the great Gods,¹ the subduer of the disobedient man,² repairer of the temples of *Bit-Sagga'u* and *Bit-Trida*, the eldest son of *Nabu-pal-uzur*, King of Babylon;



"Behold now,³ Merodach, my great Lord, has established me⁴ in

that there can be little doubt of its representing the מַלְכִּי, which in Jer. xxxix, 3, is attached to the name of Nergal-sharezer, or Nerglissor, before he ascended the throne; though I put no faith whatever in the translation ordinarily given of "chief of the Magi."

¹ The epithet thus conjecturally rendered admits of no illustration from other sources, and I abstain therefore from suggesting derivations for the obscure terms employed.

² *Sakkanasu*, which is here used for the old Hamite term  (E. I. H. Ins. Col. 1, l. 11), is the Shaphel Benoni of *kanas*, "to obey" or "submit," and thus signifies "he who makes submit," or "the subduer," being immediately cognate with the common Assyrian participle *Vasaknis*. However the old Hamite compound term  may have been pronounced, there can be no doubt of its meaning;  signified "a yoke" (*nir* in Semitic), and  was for a root which meant "to obey," so that prefixed to the name of a God, the epithet implied "submission to," the verb being used in a neuter sense; while in other positions it was used actively, and meant "causing to submit to" or "subduing." In Assyrian  seems to have been pronounced *ardu*, the title,   (Khura. 145, 3, 12, and 151, 10, 9), being replaced by    *ardu kanashu* in Khura. 123, 16. In Khura. 71, 6, the equivalent is simply  . < , "my lord, the king." "To pay homage" is also indifferently expressed by  .   =  < and   < .  <   < <, the phonetic reading in both cases being *epis arduiti*. The root apparently answers to מַלְכִּי, both in the neuter sense of "serving," and in the active sense of "making to serve" or "dominating." On the Senkereh cylinder, l. 2, Nebuchadnezzar calls himself  .   , *asri kanashu*, probably with the same meaning of "Lord Paramount" (*asri*, like *sar*, from מַלְכִּי, "to rule"). The words which follow *shakkanshu* I doubtfully read as *la abkha*, comparing the root אָבַח.

³ The initiatory particle, which is written  , *enú*, or *enuva*, in the Assyrian legends, always appears as  , *ninú*, in the inscriptions of Babylon. It seems to be a mere expletive, and should perhaps be rendered by "verily" rather than "behold now."

⁴ The verb, which I translate "established," should probably be always read *ibbaniva*, although the second character is more often given as  than as . These two characters, indeed, are not only liable to be confounded in writing, but do, I believe, actually interchange in phonetic value. In the primitive Chaldean

strength, and has urged me to repair his buildings. Nabn, the guardian over the heavens and the earth,¹ has committed to my hands the sceptre of royalty² (therefore), *Bit Saggat'u*,³ the palace of the heavens and the earth for Merodach, the supreme chief of the Gods, and *Bit Kua*, the shrine of his divinity, and adorned with shining gold, I have appointed them. *Bit Trida* (also) I have firmly built, With silver and gold, and a facing of stone ; with wood of fir, and plane, and pine, I have completed it.

"The building named 'the Planisphere'⁴ which was the tower of Babylon, I have made and finished. With bricks enriched with lapis lazuli⁵ I have exalted its head.

"Now⁶ the building named 'the Stages of the Seven Spheres,' which was the tower of Borsippa, had been built by a former king. He had completed forty-two cubits⁷ (of the height), but he

legends a vast number of derivatives occur from this root, 𐎢𐎢𐎢, which furnish a most interesting proof of the connection between the Hamite and Semitic tongues.

¹ "Heaven and earth" are always given phonetically on the Birs cylinders as 𐎢𐎢𐎢 𐎠𐎢𐎢 and 𐎢𐎢𐎢 𐎠𐎢𐎢 𐎠𐎢𐎢, *sham'ê* and *irrit*, instead of appearing under the old Chaldean forms of 𐎢𐎢𐎢 𐎠𐎢𐎢 and 𐎢𐎢𐎢 𐎠𐎢𐎢.

² The *Gispa* or *Gissapa*, 𐎢𐎢 𐎠𐎢𐎢 or 𐎢𐎢 𐎠𐎢𐎢 𐎠𐎢𐎢 is, I think, the mace, or sceptre, which the king holds in his hand to indicate royalty. It is spoken of in almost every inscription as being given into the king's hand by his guardian divinity when he ascends the throne ; it was sometimes made of gold (Khura. 151, 11, 11), and with it the king slays wild beasts. At one time I read the word *Gishla* (𐎢𐎢𐎢) and understood "a bow;" but a bow of gold seems an impossibility.

³ For a general notice of the temples of Babylon and Borsippa, see the subsequent chapter.

⁴ The Cuneiform name of this building is 𐎢𐎢 𐎠𐎢𐎢 𐎢𐎢𐎢, which I conjecturally render by "Planisphere," 𐎢𐎢 being explained in the Vocabularies by *temin*, "a platform," and 𐎠𐎢𐎢 𐎢𐎢𐎢 being the same word which answers to a sphere in the famous temple of Borsippa.

⁵ I still consider it doubtful whether by 𐎢𐎢 𐎠𐎢𐎢 we should understand Lapis Lazuli, or Cobalt, or some other mineral pigment ; all that can be said is that it was brought from Khorassan and applied to the decoration of bricks and tiles.

⁶ This adverb of time is usually written in the Babylonian inscriptions as 𐎢𐎢 𐎠𐎢𐎢 𐎢𐎢𐎢 ; but sometimes as 𐎢𐎢 𐎠𐎢𐎢 𐎢𐎢𐎢 𐎢𐎢𐎢 or 𐎢𐎢 𐎠𐎢𐎢. 𐎢𐎢 𐎢𐎢𐎢 𐎢𐎢𐎢, which must, I presume, mean "to-day," or "now." In Assyrian the form is 𐎢𐎢 𐎢𐎢𐎢 𐎢𐎢 𐎢𐎢𐎢 𐎢𐎢𐎢.

⁷ The phrase 𐎢𐎢𐎢 𐎢𐎢𐎢𐎢. 𐎢𐎢𐎢𐎢 𐎢𐎢 𐎢𐎢𐎢 𐎢𐎢𐎢 𐎢𐎢𐎢

did not finish its head; from the lapse of time it had become ruined; they had not taken care of the exits of the waters, so the rain and wet¹ had penetrated into the brickwork; the casing of burnt brick had bulged out, and the terraces of crude brick lay scattered in heaps; (then) Merodach, my great Lord, inclined my heart to repair the building. I did not change its site, nor did I destroy its foundation platform;² but, in a fortunate month, and upon an auspicious day,³ I undertook the rebuilding of the crude brick terraces and the burnt brick casing (of the temple). I strengthened its foundation,⁴ and I placed a titular record⁵ in the part that I had rebuilt.⁶ I set my hand to build it up, and to finish its summit. As it had been in ancient times, so I built up its structure; as it had been in former days, thus I exalted its head.⁷ Nabu, the strengthener of his

is very important, but very doubtful. I had at one time supposed the passage to give the date of the building of the temple, explaining $\Sigma Y Y \bar{\Sigma}$, which follows the numerals, as a cycle of twelve years; but I have since found reason for reading $\Sigma Y Y \bar{\Sigma}$ as *amma*, identical with the Hebrew אִמָּה, and for referring the measurement to the height of the original temple.

¹ *Zunnu* and *rádu* are constantly used both in Assyrian and Babylonian for rain and water, though I have been unable to find correspondents in other Semitic languages. *Zunnu* may be connected with צָנַן, "to be cold."

² The *temin* or *teminnu*, frequently mentioned in the description of temples, is certainly the foundation platform, though I know not the etymology. The resemblance to *τεμενος* is of course accidental.

³ *Salmu* and *shega* occur so frequently in Babylonian dates that they cannot possibly be the proper names of any particular month and day (compare E. I. H. Ins. Col. 8, l. 59). I compare *Salmu* with שָׁלוֹם, "prosperity," and *shega*, which is Hamite, is translated in the Vocabulary by *magaru*, "honour" (compare *migir*, "he who honours"); perhaps this is the true explanation of the Babylonian festival of the *Σακία*, the five intercalary days of the year being regarded with especial honour.

⁴ *Mikitta* is a rare word. I suppose it to stand for *mikinta*, and compare מִכְיָנָה.

⁵ *Sithir sumiya* is literally "the writing of my name," and refers, no doubt, to the inscribed cylinders, one of which is here translated. A similar expression is used in most of the Assyrian royal autographic records.

⁶ Remark that *kishiri* is here written $\langle \Sigma \rangle \langle \Sigma \rangle \langle \Sigma \rangle \langle \Sigma \rangle$, positive proof being thus afforded that $\langle \Sigma \rangle \langle \Sigma \rangle \langle \Sigma \rangle$ is used for $\langle \Sigma \rangle$ —as $\langle \Sigma \rangle$ —often is for $\langle \Sigma \rangle \langle \Sigma \rangle \langle \Sigma \rangle$. There are many other examples also of this interchange. *Kishiri*, like the Hebrew כִּישֹׁר, comes from the root כִּשַׁר, "to be right."



⁷ These two phrases are omitted on one of the cylinders, but occur almost in the same words in the inscriptions of Nabonidus.

children,¹ he who ministers² to the Gods(†), and Merodach, the supporter of sovereignty, may they cause this my work to be established for ever; may it last through the seven ages; may the stability of my throne, and the antiquity of my empire, secure against strangers and triumphant over many foes, continue to the end of time.”³

The inscription concludes with a prayer, which contains many new phrases of doubtful signification; it is something, however, to the following effect:—

“Under the guardianship of the Regent, who presides over the spheres of the heavens and the earth,⁴ may the length of my days pass on in due course. I invoke Merodach, the king of the heavens and the earth, that this my work may be preserved for me under thy care, in honour and respect. May *Nabu-kuduri-uzur*, the royal architect, remain under thy protection.”

¹ Comp. E. I. H. Ins. Col. 1, l. 33, and Col. 7, l. 28, &c., &c. In this title the singular *bal*, and the plural forms, *abil* and *aplu*, are used indifferently.

² In E. I. H. Ins. Col. 4, l. 18, a monogram is used for this participle, which in other passages has the phonetic power of *lakh*. On the Birs Cylinder the term employed is *sukkalu*, which also occurs on Bel. Cyl. Col. 3, l. 12;  in the latter passage, as is often the case, replacing .

³ This formula of invocation, with trifling variations, is common to all the Babylonian inscriptions. The general signification is certain; but in order to identify and explain each particular word, it would be necessary to collate all the various passages one with another, and this would be too elaborate a process for a mere marginal note.

⁴ The epithet of “*mukin puluk shami'ê va irsit*” refers, I believe, to Nebo, whose name, however, is omitted in the text.

NOTE.

THE publication of this paper has been so long delayed and such great advances have been made in Cuneiform study in the interim that a few words of explanation appear to be indispensable. I had originally intended to classify my Birs Nimrud researches under five heads :—1. Narrative ; 2. Account of Excavations ; 3. Restoration of the design of the Temple ; 4. Translation of the Cylinder Inscription ; and 5. Memoir on Borsippa ;—and with this view, as soon as the 4 first sections were completed. I sent them from Baghdad in November, 1854, to be communicated to the Royal Asiatic Society of London, at a meeting of which Society they were accordingly read on January 13th, 1855. The 5th section I found to grow upon my hands ; from a few pages it expanded almost to the dimensions of a volume, and the notes embracing a great variety of subjects, were but half completed when in March, 1855, I left Baghdad and returned to England. Before my arrival, the opening portions of the Memoir had been printed, but I delayed their publication in hopes of being able to finish the last Section and thus present the whole subject to the world in a complete form. This consummation, however, owing to the pre-occupation of my time with public business, I have been unable to accomplish up to the present moment—I cannot even say when I may command the necessary leisure—and I am constrained accordingly to permit the paper to appear now in the Society's Journal without the historical and geographical explanations which I consider to form its most valuable portion.

I must further observe that whilst the paper has been thus lying in type, its contents have been to a greater or less extent made public in various ways and on various occasions. I read the greater part of the paper at the Royal Institution of London in June, 1855, and again at the British Association at Glasgow in August of the same year, on which occasion M. Oppert was present. In the following year, September, 1856, having again to describe the Birs Nimrud at the Meeting of the British Association at Cheltenham, I permitted my translation of the Inscription to be printed in a local paper, from which source it was transferred by Mr. Loftus to his volume on Chaldæa, published in the autumn of the same year. More recently, further extracts from the paper have appeared in the Appendix to the 2nd volume of the Rev. G. Rawlinson's "Herodotus." I have thought it necessary to state all these facts because I am informed that

M. Oppert has recently published in the "Journal Asiatique" of Paris a memoir on the Birs Nimrud Inscription, of which he claims to be the original decypherer and translator. I have not yet seen M. Oppert's paper, preferring that my version, loose and imperfect as it is, should now appear as it was originally read, rather than in the improved form which it might assume if corrected according to recent discoveries—but having thus vindicated my claim to originality and to priority in the publication of the Birs Nimrud Inscription, I shall not scruple to call in M. Oppert's aid when I resume my labours on Borsippa.

I added one foot note in 1856, while page 26 was yet merely in type, and I have also made two verbal corrections in the translation of the Inscription (*amma*, "a cubit," and *zikur* or *ziggur*, "a tower")—otherwise the paper now published is as it was sent from Baghdad in November, 1854.

C. R.

LONDON, *October 5th*, 1858.

LONDON:
PRINTED BY HARRISON AND SONS,
ST. MARTIN'S LANE, W.C.



